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SOME THOUGHTS ON GENERAL ANÆSTHESIA: TREATMENT OF ACCIDENTS OF ANÆSTHESIA.

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So much has recently been written on anæsthesia that it would hardly seem possible to furnish any new thoughts on the subject.

But each individual experience may develop something new, and we give the following for what it is worth:

In the first place, not enough is said about the manner of administration which, in our opinion, is one of the most important matters in connection with the whole subject.

We are not a very devout believer in the alleged phenomena of hypnotism, but think a mild form of that power is very important in preparing a patient for anæsthesia.

Perfect confidence, amounting almost to an assumed carelessness, should be shown by the operator toward the patient, and such control as it is possible to acquire should be had in that way. Some slight explanation of its effects may be made if it is thought necessary, but one of the most important things to be aimed at is to be able to control the patient by suggestion during the early part of the anæsthetic process.

That this is possible may be easily proved by anyone who undertakes to carry out the necessary steps, and without the patient being at all conscious subsequently of any attempt to control.

The different stages of the process at which this control is available are, 1st:

The irritant stage, when the patient may cough, roll his head from side to side, strangle and make himself generally miserable. A little firm and reassuring address with careful regulation of the vapor will do much to tide him easily over this stage. 2nd: Comes that *dead point*, occurring in almost all cases of anæsthesia, and which to us seems the most frightful period in the whole process. It is the point reached just before the complete abolishment of sensation and movement, when the patient lying limp, seems to forget to breathe, meanwhile rolling his eyes and staring fearfully, and yet is intensely sensitive to outside impressions. At this time a few firm, imperative directions to "*breathe deeply*," or, to use a more common expression, "*take a long deep breath*", with an accompanying friendly dig in the stomach will carry him easily, safely and comfortably into the third stage, or complete anæsthesia.

But there is another very important feature in this part of the process. Between this *dead point* and the beginning of the third stage lies the stage of excitation so much dreaded by all operators. It is here that control is all important, and the will of one weak man holding the inhaler is often just as potent and much safer than the strength of six lusty fellows to hold the unfortunate patient on the table. An excitable, ill-advised word or laugh, or a rude noise will often precipitate an explosion

that may require some management to conquer and may affect the whole subsequent process. On the other hand a firm word, reassuring but commanding, will obviate all the above unnecessary and unpleasant phenomena.

I have repeatedly seen the *dead point* spoken of above, which precedes complete anaesthesia, mistaken for complete anaesthesia by operators who ought to know better, and who, acting upon their mistaken idea, have plunged the scalpel into the sensitive flesh with the result of having the patient fling himself from the table in a paroxysm of excitement. It is very probable that very many of the cases of sudden death in the beginning of anaesthesia are caused in this way, by attempting to operate at this awfully dangerous *dead point*, before the third stage of complete anaesthesia. It is notable that women are much easier of influencing during anaesthesia and much less likely to go through the stage of paroxysmal excitement, and I think it is largely owing to the fact that they are more susceptible to the influence of man's will than is man.

In my experience, though I have had almost no cases of unpleasant excitement in women, I can say with one or two exceptions the same for men. The exceptions were men whom I had not the opportunity to see, talk with and impress with my individuality before beginning the process. In other words, they were already unconscious when I took the inhaler from the hand of an operator who did not believe in my system and did not undertake to practice it.

I am very glad to see that there is one person who agrees with me; vide: abstract from *Australian Medical Journal*, in THE MEDICAL AND SURGICAL REPORTER, Jan. 21st: "That the administration should be gradual and that the principal danger is in the beginning of anaesthesia" (and not after full development.)

Though it is held by many that each successive minute of anaesthesia increases the danger, I cannot altogether give credence to that idea and I often feel safer the second half than the first half hour of an hour's operation.

It seems as though the system in a manner adjusted itself to the condition of anaesthesia, and yet it would not be well

to trust too implicitly to that adjustment, and the pulse and respiration must be watched with every sense that we possess, especially the patient's face. The operation should be as quickly done as is consistent with skill and precision. There is no doubt that a prolonged anaesthesia does depress the powers of life very much; and it should be constantly held in mind that in prolonged anaesthesia the transition from sensation to profound coma is often very rapid, requiring a very small quantity of the vapor to produce it. It is very common for operators upon the first returning sign of sensation, to urge, often imperatively and fretfully, the administrator to give the patient more ether, with the result sometimes, when the administrator is young or accustomed to defer, that he crowds on too large an amount and the result is unavoidable (?) death from ether; cause, some idiosyncrasy of the patient. Real cause; some idiosyncrasy of the operator.

The man who gives an anæsthetic ought to have a thorough and complete understanding of the whole subject of anaesthesia, and then he ought to pay very little attention to the directions of the operator except to reassure him from time to time as to the condition of the patient, and to do a little polite lying, if necessary, when requested by the operator to give more than he thinks advisable. The operator is in a position to know little or nothing of the physical condition of the patient, and he ought not to have the added responsibility and anxiety to bear. The commonly accepted signs of complete or incomplete anaesthesia are very unreliable, as anyone will find who attempts to go by them. The sensitiveness of the cornea for instance, is one of the most unreliable. I have seen a person whose cornea was extremely sensitive as proved by movement in the muscles of the lid, yet who was on the verge of deadly coma. Even extensive muscular movements of the legs and arms, with movements of the body and efforts to articulate words, are often present at the same time the patient has all of the anaesthetic that he ought to have.

It is not always safe to push it in those cases of excitement, but often with a careful continuance of the process and perfect quiet the excitement will subside, and the organism will adjust itself to the conditions of anaesthesia when it will be sur-

prising how little vapor will be found necessary. If death occur in the later stages of anæsthesia there would seem to be less excuse for it than in the early stages, especially if it come on gradually as in chronic disease processes.

We have never been so unfortunate as to be present when complete death resulted, but have been there when we think it would have taken an astute and learned professor to say that the patient was not dead.

It was a colored woman in labor some several days. A professional sister was using Barnes' dilators and I was using chloroform. The patient was very hard to influence and much chloroform was used. Being somewhat of a green hand, I was foolishly depending on that greatest of all fallacies the *sensitive conjunctiva*.

The patient was stertorously breathing, when she stopped and, as near as I could make out, she had not any pulse either. She was limp as a rag. I jumped on the bed and caught her by the heels, took one on each shoulder and throwing her over my back, stood up as straight as I could on the bed. Two slats came out and I took a fresh hold. I called for a bit of rope and tied the two heels together over my neck until some of the men folks could arrive and help me. I weighed about 130 pounds, was weak as a cat and consumptive; the woman weighed about a ton. In the mean time my professional sister with a wonderful control of mind and heart, was slap-dashing cold water, wet towels over the chest; pulling out the tongue and attempting to use artificial respiration, and at the same time keeping my heart up, for which I shall bless her to my dying day.

The patient gave a gasp after what seemed an unconscionably long time; presently another, then another and shortly began a sort of apology for breathing. Did I lay her down? Not I. Mindful of Tait's experience, I held her there listening to the welcome breath sounds for so long a time it seemed to me an half hour. When we finally laid her down the position of fœtus had entirely changed; the os, which had resisted dilatation for days, was widely open and labor went on most comfortably being completed in a few pains. A dead child being the natural (?) result.

TREATMENT OF THE ACCIDENTS OF ANÆSTHESIA.

In the treatment of the accidents of anæsthesia there seems to be very little accord or general agreement. It is a reproach to medicine and very unfortunate that such should be the case in the treatment of any condition, much more the grave complications which we sometimes meet with here.

Is it not enough that our friend the homeopath should be satisfied with superficial and hypothetical analyses of diseased conditions, and still more superficial and absurd therapeutical applications to those conditions. We ought to have a thorough and rational idea of any pathological condition that may arise and then apply remedies in an equally rational manner.

What then is the condition likely to arise which will require active treatment, and what treatment is the best and most likely to be fruitful of good results? The condition most likely to arise is overcrowding of ether which probably acts in two ways; first by its narcotic or poisonous effect on nervous matter composing the important centers of respiration and circulation; second by its mere presence mechanically preventing access of sufficient oxygen to those centers.

The treatment then, of course, will be to supply air to the blood.

Open the windows and invert the patient—generally the last things that are thought of. People cannot get it out of their heads that anæsthetics are not chemical poisons in the true sense of the word, and the most that is necessary is to supply fresh oxygen, and allow the system to eliminate the agent. Inversion and fresh air is the treatment of all cases where the patient has apparently ceased to breathe. There should be no time wasted in endeavoring to perceive whether the heart is acting or not. Prompt inversion, not allowing an instant to intervene, for in one instant who knows but that the patient may cease to live.

Throw the patient over your back, taking him or her by the heels and allowing the head to hang as low as is possible. Time, place or propriety have nothing to do with it. It is a case not of life or death, but death or life, with death in the preponderance.

The rationale of this is perfectly intel-

ligible. It is that you shall produce by means of gravity that which you cannot by means of the vital pump. Because the vital pump is for the instant collapsed, no good, struck for higher wages. By means of gravity you bathe the paralyzed nerve centers with what amount of oxygen there is left in the vitiated blood current, and thus in many cases start up the whole apparatus of circulation and respiration.

And this brings us to the second part of our treatment and that is artificial respiration. How, let me ask, will it be possible to practice any of the various methods of artificial respiration, whether it be Marshall Halls' or the Sylvesterian or what not, in the inverted position?

You must either sacrifice the position, which I am afraid is too often done, or find some new method of introducing air into the lungs.

And a method that commends itself to me is one that I saw mentioned not long since in the *REPORTER*, *i. e.*, direct insufflation mouth to mouth. I have never had occasion to try this in an adult, but have used it in several cases of comatose babes, which might have been in another world if I had not hoped, believed, and been patient. Some of these babes were white and some were black, some came by the breech, and some had the cord wrapped tightly around the neck. All were blue, limp and apparently dead. I do not remember ever to have failed to resuscitate any of them, and my method has always been the same. A large bowl filled with pretty hot water, some of which is dipped out from time to time and hot water introduced in its place. The babe is *suspended in your hands in the hot water from which it is raised for an instant from time to time, and the end of a towel wet in cold water dashed against its back and chest. Direct insufflation into the lungs mouth to mouth. I have kept this up for three hours, the perspiration rolling off me and my bones feeling as though they had been through a rock breaker. And finally had the satisfaction of seeing the limp and apparently lifeless, cold and blue body become warm and red. Then wrapping the babe in raw cotton I toast it before the fire, and in a few hours it is dressed. It does not need washing.

*Horizontally. In my experience inversion does not seem to be very beneficial, especially if kept up very many seconds. Occasional inversion for a few seconds has seemed useful.

I don't mean to say that the babe is dead. Often I have fancied that I could hear a feeble heart beat though I don't spend very much time making a critical examination.

But it does not breathe, and in all probability would I think be classed as dead birth if its blue and cold body had not been warmed into life at the same time that the breath of life was blown into it to perpetuate that warmth and life. In the beginning of my career I used to use a tube, especially if it was a black babe, but very soon threw it aside. There is no time to think of nice points such as possible infections, blood poisoning, etc. A life is at stake, a human life, and if a man saves one life in his own lifetime he may have accomplished something.

The theory of the hot water is this:— in the first place it makes the best medium possible for imparting an equalized and regular temperature to the child's body, and has the advantage that it can be nicely regulated by the addition of more hot water by displacement. Besides which I am of the opinion that with each moment that the blood is allowed to remain cold at the surface of the body, is the hope lessened that it shall be made to move and circulate healthily in the vessels.

* * *

Of course if the patient has a hemorrhage in any part of the brain, all the artificial respiration and stimulation in the world probably are not going to help him.

But the question is, might not that hemorrhage have been avoided if the conditions of circulation had been watched?

For instance there is in many cases of anæsthesia, especially in the early stages, an irregularity between the action of the heart and lungs respectively. The heart replying to the stimulant action of the ether may be acting vigorously while the respiratory center is obtunded and the patient in a manner forgets to breathe.

The refusal of the lungs to take the blood from the heart, coupled with the obstruction which the circulation has to overcome from the fact of a normal amount of oxygen being absent, would still more cripple the heart and, if the patient had any weakness of the coat of any blood vessel, it would give way to the active pumping.

A summary of the general advice

given for the treatment of the accidents of anæsthesia would read about as follows: If there are symptoms of failure of respiration or circulation, lower the patient's head; allow ingress of fresh air; give hypodermically whiskey, ether, digitalis, strychnine—any or all of them.

If the patient has ceased to breathe use some method of artificial respiration.

And incidentally it is advised to use a medium strong Farradic current. This brings us to the last point in our treatment. The use of drugs—And here there is no general agreement, but one thing may be doubted, one would think, and that is that when the circulation is in a very weak condition there will not be very rapid absorption.

THE DIFFERENT FORMS OF IRITIS AND THEIR TREATMENT.

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Iritis, so disastrous in its effects upon the eye, is perhaps the one disease that may be the most easily mistaken for a simple inflammation and yet when recognized it will yield most beautifully to proper treatment.

I submit that iritis exists in three distinct forms. 1. Simple iritis; 2. Plastic iritis; 3. Suppurative iritis.

Under the second form I will include *a*. Syphilitic iritis; *b*. Rheumatic iritis; *c*. Traumatic iritis.

These latter forms may easily, and sometimes do, pass into the suppurative form—especially the syphilitic iritis.

SIMPLE IRITIS

is an affection of the iris in which inflammation exists in the simple form, and in which we have the vision impaired to a more or less extent. Objects that are easily discernable by the eye in its normal condition can hardly be seen, or seen as if a mist had completely enveloped the object. The eyelids are closed that all the light may be excluded. Photophobia exists to a marked extent, dependent entirely upon the intensity of the inflammation. The cornea as a general rule is not cloudy in simple iritis, though in the graver forms it may be clouded and even opaque.

One very noticeable and diagnostic feature of iritis is the circum-corneal injection which is very characteristic, once seen can never be mistaken and is very often of considerable assistance in making the diagnosis. This circum-corneal area of injected blood vessels

presents a uniform pinkish appearance, not red in any one part more than in another, and appearing rather deeper than the conjunctiva, which in reality is the case, the vessels injected being scleral vessels. The injection of these vessels is pathognomonic of iritis. Pain may exist in simple iritis, (not the painful vision which we know as photophobia, but characteristic temporal and frontal pains,) or may be absent entirely. There is no more variable or inconstant symptom of iritis than pain.

The iris itself presents the most characteristic changes. The iris is sluggish, slow in moving when light is thrown upon it by the focal illumination obliquely, not because it is attached to any substance that holds it in its place, but because the exudation from the inflammatory area prevents the proper functioning of the muscle fibres. The iris also changes its color very materially, taking on an ugly yellowish brown. It has the appearance of being elevated by small excrescences, in the shape of small papules or cilia and gives one the idea of fungoid growth. The color of the healthy iris has much to do with the color of the inflamed iris, the mixture of the two colors rarely resulting in a pleasant combination. The amount of color change may be very small indeed, in fact may escape a casual observation and require a very close examination. The change usually begins at the pupillary orifice and gradually extends toward the periphery in lines gradually merging, thus forming one complete surface of muddy, inflamed area.

The treatment of iritis differing somewhat in degree according to the intensity and variety of the inflammation, is

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pretty much the same, consequently I will omit to speak of that now.

PLASTIC IRITIS.

The symptoms of this form of iritis differ in degree of intensity from the former. We have pain in the frontal and temporal region, in fact in every part of the head and even down the back, but the pain is particularly marked in the frontal and temporal regions. Photophobia exists, the vision is impaired greatly, the aqueous humour is cloudy and murky, the membrane of Descemet is inflamed and swollen, sometimes the cornea also, the substance of which may be infiltrated and the transparency of which is consequently impaired. The iris is muddy, sluggish, and the pupil may be dilated or contracted, may be bound to the lens by plastic adhesions in its entirety, or only in separate points, thus giving it an irregular appearance. The circum-pupillary area is always changed in color more than any of the other parts, this area seemingly being the most susceptible of all the parts of the iris to inflammation; there may be part of the pupil occluded or there may be an entire occlusion with the iris bound to the lens in every part and a plastic membrane thrown over the pupil. Or this plastic membrane may not be present and the pupil free so far as admission of light is concerned, yet, the communication between the two chambers, prevented. This in itself is a matter of serious consequence as the anterior chamber depends upon the ciliary bodies behind the iris for its supply of aqueous humour; such a condition is known as total posterior synechia or occlusion of the pupil.

The first subdivision of this form is syphilitic iritis. In this we have the form of iritis capable of the greatest destruction and damage to the eye, and yet, in an otherwise healthy and vigorous constitution, it is most tractable and yields most readily to treatment. It is on this account that syphilitic iritis is the most preferable form to treat, because syphilis is so amenable to the use of iodide of potassium. Syphilitic iritis comes on as a secondary symptom of syphilis and may be accompanied by a rash general in character. Pain is rarely very great, certainly not in proportion to the inflammatory condition of the eye. Gum-

matous nodules make their appearance very often during the course of syphilitic iritis. I have noticed these gummata to appear more frequently in the negro than in the white; this may have been a coincidence of hospital practice and have no value whatever. Sometimes these gummatus growths suppurate and fill the anterior chamber with pus.

These gummata often leave a cicatrix causing a permanent change or alteration in the iritic substance.

The next subdivision of plastic iritis is that very stubborn, very slow form known as rheumatic iritis, seen in patients that have had rheumatism for a longer or shorter time—usually in old persons that have become completely saturated with rheumatic poison. Such iritis means slow recovery, for the reason that rheumatism yields slowly to general treatment, and this shows the vital difference between syphilitic and rheumatic iritis.

Rheumatic iritis is attended with severe pains in the head, and in the eye the conjunctiva is very much injected and swollen; at times the scleral vessels are congested and the sclerotic being a fibrous structure takes on the specific rheumatic inflammation. While the pain is greater and the injection and apparent inflammation greater in rheumatic iritis than in syphilitic, the exudate is less and consequently the damaging results and sequelæ from exudation are less liable to occur, as we rarely see such damage wrought by rheumatic iritis as by the syphilitic form.

Syphilitic iritis has a greater tendency to cause adhesions than has rheumatic iritis, is shorter in duration, and when alleviated speedily recovers and has no tendency to the relapses which are so numerous in rheumatic iritis. Again the color of the iris is not changed so much in rheumatic iritis as it is in the syphilitic form, simply because we do not have that immense amount of exudate in the former.

The third form of plastic iritis is that seen following a traumatism of any kind, whether penetration of the globe is accomplished or not. In many cases a blow is received in the eye and a violent inflammation ensues. The conjunctiva becomes reddened, swollen and oedematous; the iris congested and changed in color; the pupil sluggish in response to light, and all the phenomena of iritic ad-

hensions may form if the pupil be not properly dilated. The blow may have caused a wound of the cornea, perhaps not sufficient to allow of hernia of the iris, yet sufficient to allow the escape of the aqueous humour and the formation of anterior synechia—the iris becoming adherent to the cornea. The part which usually becomes attached to the cornea is the pupillary margin, the pupil is usually elongated and drawn toward the wound in the cornea, the usefulness of the eye being impaired.

SUPPURATIVE IRITIS

Usually follows a gumma—though it is not always a result of syphilis. The gravest affection of the iris is this suppuration because such destructive changes occur.

Rapid are the changes in this form of inflammation. The color of iris becomes quickly changed, the aqueous and cornea become cloudy and murky, the eye intensely inflamed with much pain and photophobia, the iris is perceptibly swollen and bulged forward, the pupil very sluggish and oftentimes immovable and entirely closed with no reflex whatever to the ophthalmoscope.

There usually appears a point of inflammation and suppuration in the substance of the iris, which sooner or later discharges a purulent substance, which gravitates to the bottom of the anterior chamber and may be so great as to reach the level of the pupillary orifice.

Suppurative iritis is usually associated with a lowered condition of the system. Suppuration may also result from a traumatism. The suppuration is not at all limited to the iris, but may extend throughout the uveal tract to contiguous areas. The vitreous may become muddy, and the result may be panophthalmitis.

In the treatment of iritis one point takes precedence over all others, it is to always dilate the pupil. The reason for this dilatation is to keep the edges of the iris from the margin of the lens, and to facilitate emptying the globe of deleterious matters by a free circulation through its vessels and canals.

The best means of preventing these adhesions is the use of atropine. A weak solution may be used at first if no adhesions have formed, and the dangers

are averted. A one per cent. solution of atropiasulphas in water, instilled every two hours in the initial stage of iritis, no matter of what variety, will prevent adhesions. Should the adhesions have formed, we must use stronger solutions until we have broken them. The use of an ointment consisting of vaseline one drachm, atropia sulphas five grains, every hour for a few hours, and then every two or three hours, will prove very efficacious in breaking adhesions that have resisted weaker solutions. The iris will dilate where it is unattached, thus giving an irregular shaped pupil showing the point or points of adhesions. It has been recommended to use alternately, solutions of atropia and eserine. I cannot commend this method as I think it inflicts unnecessary pain without accomplishing any benefit, certainly not sufficient to justify its use. The atropia being a more powerful drug than the eserine, the latter has no appreciable effect whatever.

Atropia is our most valued drug in the treatment of iritis and yet occasionally we must dispense with its use because it causes too much local irritation, and also causes constitutional changes peculiar to belladonna poisoning. Occasionally a single installation of a solution of atropia will cause all the violent symptoms of atropism. In such cases we are not at a loss for a substitute, as we have hyoscyamine, duboisine, hornatrophine, with their salts. The duboisine should be used in weak solutions as it is possible that idiosyncrasy may exist for it as for the other mydratics.

The relief of pain and of congestion seems to be next in importance. Atropine is a sedative and tends to alleviate the pain; heat in general will diminish pain; a good way is to immerse the eye in a cup full of hot water and then apply dry hot cloths or cotton wool. The use of leeches, natural or the artificial often relieves pain by depletion. The amount withdrawn by the leech should be about an ounce. Salicylate of soda, 10 to 15 grains every three hours, will sometimes relieve the pain considerably. A dernier resort for relief is paracentesis of the anterior chamber; this, when properly done, rarely causes any unpleasant effects. The wound in the cornea should be prevented healing by the insertion of a blunt probe,

that the tension may be relieved as much as possible.

When iritis is seen in its early stage, iced applications are far better than warm or hot applications. The latter rather tend to promote inflammation, while in the early stages cold tends to abort it. In cases that assume a chronic appearance—better one week and worse the next—the most reliable remedy is iridectomy, which should be done upwards when the tension of the eye becomes plus and the other symptoms marked showing no signs of disappearance. Each case should be judged on its own merits and no hard and fast line can be laid down.

If a few points of adhesion exist and no recurring attacks appear, it is far better to let the eye and the adhesions alone. But should iritis appear from time to time it is necessary to free the iris from the lens.

One method is to make the corneal wound as near the attachment as possible and large enough to admit the introduction of the forceps, and seizing hold the iris draw it away from the lens, thus liberating it, being careful, of course, not to wound the lens. Another method is to make the corneal incision opposite to the attachment, then passing a hooked spatula in and beneath the iris, try to lift it from the lens. After each of these operations use atropia and close the eye with a light bandage. In cases where we have total occlusion of the pupil, with total posterior synechia and no communication between the anterior and posterior chambers, the best method is free iridectomy upwards and downwards; this method has a two-fold value, establishing communication between the two chambers and, at the same time, forming an artificial pupil which enables the eye to discern objects.

In iritis with suppuration and hypopyon, paracentesis is the only means to be employed. In some cases, when the amount of pus in the anterior chamber is small, the use of constitutional remedies often absorbs the exudate. Blood-letting is contra-indicated in all such cases, as are all remedies that tend to lower the vitality. Of course, systemic treatment is indicated chiefly in syphilitic and in rheumatic iritis. For the relief from pain we may resort to chloral hydrate or morphia, either internally or hypodermically.

When syphilis is undoubtedly present we should push mercury and iodide to the full limit. If necessary mercurial inunction should be practiced, and kept up until signs of the disease begin to disappear. My usual method is to give $\frac{1}{4}$ grain proto-iodide of mercury in an excess of iodide of potassium, and increasing the dose until the disease shows signs of abating. In rheumatic iritis the treatment, as a general rule, will not be so encouraging as in the former. Rheumatic iritis, in my experience, has been very tardy and frequent relapses occur, simply because the iritis appears very late in chronic rheumatism, while iritis appears as a secondary symptom of syphilis and manifests itself early in the disease if it is going to appear at all. With salicylate of soda and the general alkaline treatment I have found as good results as with any other.

Dandruff Cures.

A correspondent of the *Lancet* asked for advice regarding very persistent dandruff which affected a female patient, and he has received the following responses:—Dr. David Couper, of Glasgow, advises the patient to wash well the roots of the hair twice daily with a lotion composed of perchloride of mercury in a saturated alcoholic solution of boracic acid (quantity not stated). When this has dried let her rub in an ointment of sulphur and carbolic acid—say, 20 grains of the first and $\frac{1}{4}$ drachm of the other to the ounce—using lanoline or lard, or a mixture of both as an excipient. Dr. E. Curtin says he has had good results in obstinate cases of scurf of the scalp by washing the head in warm water containing about 3 drachms each of sod. bicarb. and liq. picis carb. to the quart, and afterwards applying ichthyol ointment. Dr. E. Fenoulhet, of Herne Bay, suggests a weak sulphur ointment. He has used it of the strength of 2 drachms to the ounce of vaseline in a most obstinate case of dandruff with complete success.—*Ex.*

Coffee as a Cause of Itching.

Dr. Brown Sequaid again draws attention to the fact that occasional Pruritus Ani depends upon drinking coffee, and publishes a case in which leaving off the beverage completely cured a case, the malady returning on recommencing the beverage.—*Therap. Monat.*

CLINICAL LECTURES.

LYMPHADENOMA.

E. FLETCHER INGALS, A. M., M. D., CHICAGO,*

This young man is 23 years of age. He comes to us from Iowa, complaining of a cough which has lasted for about two months. He is a farmer, and so far as we are able to learn, has lived a regular life. He claims that he has had no venereal disease and there is no reason to suspect it. You notice that the face, ears and nose are congested, and this is especially marked when he has been out in the cold. He tells me that about five months ago he first noticed some swelling in the neck, on the right side, just above the clavicle. About two months afterwards he noticed also a little swelling upon the left side. Three months after he first noticed the swelling upon the right side he began to cough, and he has now a short, hacking, sometimes paroxysmal, cough which is very troublesome. He had very little pain and did not at first consider the cough a very annoying symptom. The sputum is comparatively small in amount. He has been troubled with shortness of breath since the cough began. During the last two months the symptoms have steadily increased and he has been unable to work for five weeks. On the 10th of December he had a strangling spell with the cough, lasting several minutes, during which he thought he was dying. The difficulty in breathing has gradually increased until he now gets out of breath in walking an ordinary block. During the last few weeks his appetite has been poor and he thinks he has lost considerable flesh. I find that he was subject to frequent attacks of croup until he was 12 years of age.

Inquiring into the hereditary history we find nothing whatever. His father who came with him appeared to be a sound man and told me that on neither side of the family has there been any hereditary disease that he knows of.

I find the temperature 100°; pulse 100 and about three-fourths as strong on the right side as on the left. The voice is

slightly hoarse, but there are no other symptoms.

Examination of the nasal cavities shows that the right side is about three-fourths closed by swelling, but this is probably due to an acute cold. The uvula and pharynx are slightly congested, (about ten per cent). The tonsils are normal.

On examination of the larynx I find only about five per cent. of congestion and the cords move freely; the arytenoids overlap each other fully one-fourth during phonation, although such a condition is frequently found in health and both sides move alike in this case, I see no reason to think that this change in the movement of the arytenoids is in any way due to the disease. I am unable to see the trachea except in the upper part which I find congested about five per cent. As a standard of congestion 100 per cent. would indicate the deepest red which might result from catarrhal inflammation.

Upon superficial examination of the neck we observe on the right side just above the clavicle, a movable swelling, somewhat nodular and appearing to be made up of a number of glands. It is about two inches in its lateral diameter, about two and a half inches vertically and apparently about an inch in thickness. Upon the left side we find a similar enlargement just above the outer portion of the clavicle, an inch and a half in its different diameters and not more than three-fourths of an inch in thickness. On the right side there is a slightly enlarged gland a little below and back of the inferior angle of the jaw. There are no enlarged glands on the posterior aspect of the neck. There is a slight enlargement of one of the axillary glands, but not more than might be found in many healthy persons.

You will observe the prominence of the superficial veins which are quite tortuous and stand out distinctly over the upper portion of the chest, more especially upon the right side, running over the right shoulder and down the right arm. You see also a diffuse swelling at the anterior

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and lower portion of the neck, extending from side to side, not quite as prominent upon the left side as it is upon the right. The swelling is soft and elastic with no enlarged glands beneath it. It is due to turgescence of the smaller veins caused by obstruction to the return of blood to the heart as indicated by the enlarged and tortuous veins.

The movements of the chest are not as free as in most healthy men, but they are alike on both sides. The respiratory movements are much more pronounced at the lower part of the chest than at the upper. I find an abnormal area of flatness at the upper part of the sternum as low as the third rib, extending into the right and left intra-clavicular regions. By careful percussion I find that it extends about an inch to the right of the sternum and from the third rib to the clavicle. There is also very decided dullness about an inch in width extending along under the right clavicle an inch farther toward the shoulder. As I percuss to the left of the sternum, I find an area of flatness extending from the third rib to the clavicle, the outer border of which runs upward about half an inch from the sternum in the second interspace. Over the whole area of the upper portion of the sternum down as low as the third rib (right), we have perfect flatness extending under the right clavicle and to the middle third of the left clavicle. The resonance at the inner portion of the suprascapular region is not quite as great as normal, but still there is not a distinct flatness. I find the apex of the heart in the usual position and the sounds normal. There are no abnormal murmurs heard over the upper part of the heart.

Upon listening over the lungs, I find distinct respiratory sounds over every portion of the lung except in the small area where we get the flatness. I find, however, that there is a loud, tubular sound, not very pronounced but still distinct, differing from that which we get in a healthy chest. This we might call a sonorous rale and as the sound is heard all over both lungs it must come from the trachea. If it were from a bronchus it would be heard on one side only. I find on the right side of the sternum a little of the bronchial element in the murmur, sufficient to distinguish it as broncho-vesicular. Distinctly over the sternum I hear noth-

ing whatever of the pulmonary sounds, either bronchial or otherwise. A little to the left I hear broncho-vesicular sounds, but not as distinct as upon the right side.

The symptoms and signs in this case are evidently caused by a growth back of the upper part of the sternum, which is probably connected with the tumor visible above the clavicle.

A tumor occurring behind the upper part of the sternum has about nine chances out of ten of being an aneurysm. As a rule aneurysms do not occur in patients under 45 years of age; indeed they are quite exceptional in young patients. Aneurysms are apt to cause difference in the radial pulse of the two sides such as we find here. An aneurysm may cause a murmur, but not necessarily. I think in fully one-half of the cases I have seen of aneurysms of the aorta, there have been no abnormal murmurs. An aneurysm is also apt to cause more or less enlargement of the veins of the surface by obstructing the return blood through the descending vena cava or through one of the innominate veins. Aneurysm of the aorta is almost always attended by a peculiar pain, which is apt to be present in the very beginning, possibly before the patient experiences any other discomfort. This patient has had no pain in the upper part of the chest. In cases of aneurysm you will nearly always be able to feel pulsations, by pressure with the hands upon the anterior and posterior surfaces at the point where the tumor lies, even though the pulsations may not appear upon inspection or by palpitation on the surface only. We get no pulsation whatever in this case. Although in this case there are some symptoms and signs similar to those of an aneurysm, the patient's age, the absence of pain and of pulsation over every part of the tumor, the existence of a tumor above the clavicles and the absence of abnormal murmurs are ample to enable us to exclude aneurysm.

An abscess of the mediastinum would seldom be attended by enlarged glands above the clavicle; it would usually cause pain and would nearly always be attended by hectic fever and marked constitutional disturbance. This patient's general condition is excellent; there have been no rigors, and little, if any, fever and there is no pain; we can, therefore, exclude abscess with safety.

Somewhat similar symptoms to those we have found here may result from thickening, the result of syphilis; but we have no evidence of syphilis in this case, and as the boy has come from the farm and appears truthful in his statements, and there are no earmarks of the disease, we ought not to accuse him of having had it.

Nearly all solid growths in the mediastinum are malignant, though they are not necessarily true cancers. We have, for example, in the affection known as lymphadenoma a disease which, although not cancer, has in this locality a malignant clinical history, and I know of no possible way whereby we may accurately differentiate between it and true cancer. In this case the following features point to the diagnosis of lymphadenoma; there are several enlarged glands above the clavicles; the patient manifests no peculiar cachexia and he has no pain. In true cancer there is usually pain, and cachexia is commonly developed comparatively early. Lymphadenoma is apt to crowd the lungs before it; cancer to involve every tissue with which it comes in contact. The lungs in this case seem to have been crowded before the tumor to the right and left of the sternum. If we had here true bronchial breathing we would conclude that the lungs were involved, either by infiltration with cancerous deposit or by inflammation caused by pressure; but the sounds which we hear in this case are so feeble that they may be transmitted from the trachea. We cannot say positively if the lung tissue itself is or is not involved; but as the patient has no expectoration the chances are that the lung is simply crowded before the tumor and that the broncho-vesicular sounds are transmitted from the trachea and larger bronchial tubes.

The diagnosis is thus narrowed down to either lymphadenoma or carcinoma, with the weight of evidence in favor of the former.

Practically all cases of mediastinal tumor of any size are malignant. I may say, with reference to the prognosis in this case, that it makes very little difference to the patient whether we call it lymphadenoma or carcinoma; the progress of the case most assuredly will be from bad to worse. The chances are that this tumor will continue enlarging, pressing

more and more upon the trachea or bronchi until breathing becomes difficult or deglutition is prevented. By compression of the trachea and the lodgment of tenacious mucous at the point most constricted sudden death may be caused, or, as frequently happens in these cases, the disease may cause inflammation of the lung with abscess or gangrene. If the tumor presses on the œsophagus he may die from starvation.

As to the treatment, unfortunately there is nothing which seems to hold out any hope for this patient. There can be no hope from the surgeon's knife. We will put him upon the iodide of potassium and chloride of calcium to see whether any reduction of the glands can be effected by these drugs. I have on previous occasions told you that in simple enlargement of glands chloride of calcium sometimes has a pronounced effect, and iodide of potassium acts similarly. Another reason for prescribing iodide of potassium is, that sometimes even malignant growths will, for a time, diminish under its influence. We will give this patient $7\frac{1}{2}$ grains of each of these remedies, and gradually increase the dose to fifteen or twenty grains of each. I shall have him weighed daily in order to ascertain the effects of the drug. If it acts favorably we will expect an increase in weight. If, on the contrary, it has no beneficial influence, then we will expect the patient's weight to gradually decrease. If the weight augments the remedies will be continued, but if at the end of ten days he has lost two or three pounds, we will send him home with whatever comfort we can give him, feeling sure, however, that his prospects for recovery are gloomy.

I am especially glad to show you this case as it is one of extreme and unusual interest, and while it is true that no clinician can frequently present such cases on account of their rarity, still you may happen to fall upon one in your practice, and you will be aided in making a correct diagnosis after having seen this one.

To prevent or to put a stop to the formation of new tissue in the kidneys, in cases of interstitial nephritis, Prof. Da Costa believes that the bichloride of mercury is of more value than the iodide of potassium.—*Ex.*

COMMUNICATIONS.

AN UNUSUAL CAUSE OF RETAINED PLACENTA WITH CASE.*

J. H. VAN EMAN, M. D.†

Mrs.—, æt twenty-three; married at nineteen; the mother of three children, the last born Sept. 22d, 1892; has always been healthy, though subject to intense headaches, particularly since her marriage. She is a good sized, healthy looking young woman. Her first child was born about a year after her marriage, was alive, and the labor, though somewhat tedious, terminated with the unaided powers of nature and without a torn perineum. The second child was born less than two years after the first, and this labor resulted in a badly lacerated perineum, which was properly repaired with a good result. She did not menstruate after her second labor, and did not know she was again pregnant until her increasing size and later, the fetal movement, gave absolute evidence as to her true condition. Her third pregnancy was uneventful excepting an almost continuous pain in the right side near the level of the crest of the ilium.

She was taken in labor Sept. 22d, 1892, and was in labor for about twelve hours. The first stage was slow on account of the early escape of the amniotic fluid. The second stage was rapid. The child large and plump. The cord a good length and not around the child's neck. An examination made immediately after the birth of the child showed a large and very firmly contracted uterus. Making further investigation twenty minutes later, I found the placenta was entirely within the uterus, only the cord hanging out of a firmly contracted os. No attempt having been made by the uterus to expel the placenta at the end of forty minutes, the vagina was well cleaned out. Introducing my fingers into the vagina and thence into the cervix, I found the entire placenta firmly adherent to the right antero-lateral uterine wall. Passing my whole left hand into the vagina and steadying the uterus with the right hand, by working slowly and carefully, I separated the placenta from the

uterus. I was compelled to introduce my whole hand into the uterus and found not only universal adhesion to the uterine wall, but also that it extended outward to the right into a funnel-shaped opening, which on manual examination proved to be the right Fallopian tube. The adhesions once thoroughly broken up, the uterus promptly contracted. The placenta and my hand were expelled from it at the same moment. After being thoroughly cleaned up the patient became quite comfortable. Her convalescence, barring her intense headaches, was uneventful, no rise of temperature occurring at any time. The lochia was moderate in quantity and without any odor. At the end of a week she was dismissed as being entirely out of danger.

This case is reported not for the purpose of making an argument for early interference in cases of retained placenta, but as a text for opening up and bringing on a discussion on a subject generally considered as settled by physiologists and obstetricians; viz: where does the ovum in the human female become fecundated?

The process of procreation may be divided into at least three steps:

1st. Ovulation.

2nd. Fecundation.

3rd. Fixation of the fertilized ovum.

According to Leopold and other authorities ovulation, consists in the rupture of a matured Graafian vesicle, which event usually takes place during a menstrual period, but may occur at any time, as in my case and many others on record. Impregnation having occurred without any evidence at all of menstruation.

At the instant of rupture of the vesicle one of two things must occur, either the fimbriated extremity of the Fallopian tube grasps the ovary, and the egg drops into its trumpet-shaped end, or the ovum is carried into the mouth of the tube by a ciliary movement of the epithelium. Once in the tube it is more or less rapidly carried through it to the uterus by the ciliary movement of the epithelium of the tubular mucous mem-

*Read before the Western Association of Obstetrics and Gynecology.

†Professor of the Diseases of Women Kansas City Medical College.

brane. In the rabbit it is said to do so in seventy hours; in the dog in eight days. In the human female the time is unknown. According to the books, after copulation the spermatozoa swarm around the ovum, each one endeavoring to effect an entrance into it. After a time the stronger and more active of the crowd effects an entrance into the ovum, its tail disappears, its head forms the male pronucleus and uniting with the female pronucleus, the act of fecundation is completed. The balance of the spermatozoa lay superfluous on the stage and soon retire from the scene. This is the earliest act in the creative plan, of the survival of the fittest. Everything is now ready for the third stage. The fertilized ovum following some unknown law, or possibly no law at all, either passes down the tube into the uterus where, usually high up on the postero-lateral wall, sometimes low down, even to or below the internal os, fixation finally occurs. The decidua rapidly rises around it and soon encloses the embryo in a dome-like covering. From this time, the conditions and position being favorable, the development of the fœtus goes on to full term. This as I understand it is the teaching of the physiologists and obstetricians of to-day.

To the first postulate I agree; from the second I dissent. I deny that in man fecundation takes place in the tube. Excepting in those cases where, as a result of disease, the cilia of the tubes have been destroyed over a portion of their length, thus making a break in the highway along which the ovum is carried. The ova, being absolutely passive, remain at rest on being carried to the broken bridge. The spermatozoa, having an independent movement of their own, are able to cross over the damaged portion of the tube, fecundation occurs, fixation takes place, and as a result we have an extra-uterine pregnancy. Normally fertilization takes place in the uterus only, fixation occurring at the same moment and that point becomes later the center of the placental attachment. Should the contact of the two elements occur late when the ovum has descended low in the uterus, to the internal os, or possibly even below that point, we have as a necessary result, placenta previa. This theory or one very similar was, so far as I have knowledge first

enunciated by Lowenthal years ago, later I believe by Tait. Permit me to further crave your patience while I give a few reasons for my belief.

1st. All investigations in this direction have been made on the lower animals. Their laws of procreation differ widely from those of man. The female permits the approach of the male only at such times and at such a season as is most favorable to reproduction. Impregnation being accomplished the rut or heat of the female ends at once and promptly. Should fertilization not take place, no sexual desire is manifested until, in the cycle of ovarian changes, impregnation again becomes possible. It is hardly necessary for me to say that in the human animal a somewhat different law seems to govern. It has already been stated that in the dog it has been demonstrated that it requires a period of eight days for the ovum to reach the uterus. I believe that in the human female it requires at least eight days, and in all probability the ovum is at a point where fruitful copulation is still possible for four or five days longer. At least the most favorable time for conception is not less than eight days after the beginning of menstruation.

In evidence of this take the woman whose religion deems her unclean from the first appearance of her period until the beginning of her second week. Yet no greater fecundity has ever been shown than among the Jews in every age and clime; this law like all those of the decalogue or those founded upon it, was one of exceeding wisdom and tended to the conservation of the species by preserving the woman from the dangers of extra-uterine pregnancy. In other words extra-uterine pregnancy is liable to occur under one or the other of the following conditions:

1st. When by reason of the destruction of the cilia in the Fallopian tubes the ovum is prevented from reaching the uterus.

2nd. When copulation occurs immediately preceding menstruation and the spermatozoa reach the ovary even before the rupture of the Graafian vesicle. This also applies to women who ovulate after childbirth without any menstrual flow.

Coming back to my case, the ovum was fecundated while passing through the intra-mural portion of the tube. Fixation occurred near the proximal end of the

tube. In the process of development the placenta extended in the direction of the least resistance; fortunately for the patient this was in the direction of the uterine cavity. An embryo which in the beginning was outside of the uterine cavity later entered the cavity. All the pain during pregnancy and the trouble at the end of the term, resulted from the abnormal point at which fecundation took place. Had fixation or in other words fecundation, occurred a little further out in the tube an extra-uterine pregnancy with rupture into the abdominal cavity would have been inevitable. That all this may be pure theory and without foundation I am ready to admit. Investigation in this line has in the last decade been neglected. One author quotes from another, Lusk from Flint and Flint from some earlier writer.

No other scheme so fully accounts for the phenomena of reproduction either normal or abnormal and it calls for no violation of any natural law. Briefly stated it is:

1st. The human ovum is conveyed by the movement of the cilia of the tube from the ovary into the uterus. This process lasting from eight to fourteen days.

2nd. The uterus during this interval has been prepared for its reception and development.

3rd. The ovum on being fertilized after its entrance into the uterus at once becomes fixed. And all things being favorable the development of embryo goes on to term.

4th. That all departures from this law are pathological and not physiological, the exception and not the rule.

SPECIFIC VAGINITIS.*

JNO. G. CECIL, B. S., M. D.†

Several questions relating to different phases of this subject are of sufficient interest and importance to justify further consideration; in truth, it would well become the profession to continue to agitate this well worn theme until some more definite conclusions could be established than can yet be claimed. It is with this end in view that the suggestions embraced in this short paper, are offered, trusting that the discussion may crystallize our present knowledge into more definite shape.

Perhaps a simple enumeration of the possible sequelæ and complications that may arise from specific vaginitis will not be out of place here. There is hardly another disease in the whole category of human ills that can boast of such a progeny. A partial list comprises—inflammation and abscess of the vulvo-vaginal glands, vulvitis, endometritis, and endocervicitis, salpingitis, ovaritis, peritonitis, cystitis, pyelitis, nephritis, adenitis, gonorrhœal rheumatism, gonorrhœal ophthalmia, proctitis. Does not this list plead with burning eloquence the gravity, the importance of this disease to the human race, and for the untiring vigilance

and zeal of the medical profession in grappling with it? And not only the medical profession but civil authorities as well? The social evil has always existed; judging the future by the past and present it always will exist. I believe that licensed prostitution, with governmental inspection in systematic and regular manner, and compulsory sequestration and treatment by competent physicians will do more to limit the spread of gonorrhœa than any other means yet suggested. It would require years and scores of years of continuous effort to accomplish very many visible results.

This is a contagious disease and must propagate by contagion, its control therefore ought not to be an impossibility, any more so at least, than any other contagious disease. I am forced to conclude that medical men are not as keenly alive to the terrifying consequences and possibilities of this disease as they should be. The popular fallacy that "a clap is no worse than a bad cold" has too many adherents in the ranks of the profession. This seems a justifiable deduction from the careless inspection of new and acute cases, the hasty prescription, the more hasty and imperfect directions as to the

*Read before the Clinical Society of Louisville.

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use of injections, douches, etc., and particularly the acceptance of a statement from the patient that the cure is complete, in lieu of a thorough and pains-taking examination of every surface or canal involved. A valuable clinical point in differential diagnosis between simple and specific vaginitis that is agreed upon by modern authorities is that urethritis or endocervicitis, or both, are always present in gonorrhœal vaginitis.

As to the pathology of specific vaginitis we are still in perplexity. For many years after the discovery of Neisser we made obeisance to his gonococcus, but at present it appears to be the consensus of opinion that something in addition to the presence of Neisser's bacillus is necessary to the development of gonorrhœa. What that something is constitutes the perplexing question. Experiments made by Neisser, Krause, Löffler, Bouchard, Burner and others demonstrate the failure of pure culture of the gonococcus to produce gonorrhœa.

The question as to how long the specific virus of gonorrhœa may retain its activity in the genital cavities is one of exceeding interest and importance, and one to which I have seen no conclusive answer. This question is often put relative to a prospective marriage, or as to how soon after an acute specific inflammation of the vagina and urethra should a prostitute resume her avocation. It will be difficult to formulate a law applicable to all cases. Certain it is however that gonorrhœal virus of propagating activity may lurk in the various pockets and glands long after all subjective symptoms have subsided. Herein lies the particular necessity for a searching examination of every gonorrhœal patient before final discharge. This clinical fact is also the probable explanation of the auto-infection of puerperal women, a class of cases that make much work for the pelvic surgeon.

TREATMENT:

Under this heading it would be difficult, even if it were necessary to suggest anything new pertaining to medicaments. I am prepared to admit that many of the different lines of treatment at present in vogue are efficient. The success or failure of any particular method of management depends more upon the guiding hand and the strict adherence to directions

explicitly given, than upon the medicine used. Many of the popular prescriptions and injections will be found satisfactory provided the details of management are faithfully carried out.

Given a case of acute gonorrhœal vaginitis, it is well to divide the treatment into three stages. First—in the initial stage of acute suffering with active inflammation, the treatment should be of soothing character, the injections of very mild solution and given in large quantity, nothing is preferable to corrosive sublimate in strength of 1 to 10,000 given warm, and with it an anodyne such as cocaine or morphine if necessary to relieve pain. Diluent drinks are serviceable and rest is imperatively demanded. Second—after the acute symptoms have subsided the treatment should then be more vigorous and active. The strength of the douche should be increased to 1 to 2,000 or 3,000 of corrosive sublimate and administered twice or three times in twenty-four hours. It is just at this point in the treatment of a case that the discipline necessary to a complete cure is likely to be relaxed—the suffering gone or relieved, the patient naturally concludes that strict attention to directions is no longer obligatory. Many cease the treatment altogether and so are only half cured, or really are not cured at all, but go to fill up the ranks of chronic or latent gonorrhœas. Another point that should be most strenuously enjoined is the proper method of administering the douche. The fountain syringe or douche-can should be used in order that large quantities may be given; the douche point should be of glass and should be immersed in a carbolic acid solution when not in use. The patient must be in the dorsal decubitus with hips elevated. The doctor ought to give the first douche himself and so instruct the nurse who is in charge of the case as to the exact detail of each subsequent douche. The glass point is introduced the entire depth of the vagina and with two fingers of the disengaged hand, every pocket or cul de sac, and the sulci between the vaginal rugæ are opened up or spread out so that the medicated wash reaches every part of the diseased surface. It is apparent that no woman can properly administer a douche to herself. After the injection a tampon of iodoform gauze is left against the cervix uteri. For the accompanying urethritis a pencil of iodoform is

left in the urethra, twice daily. Third— if chronic vaginal inflammation or cervical catarrh persist after a treatment carried out in thoroughness of detail as above indicated, it is probably due to extension of the disease into the cervical or uterine cavity, and attention is now directed to these localities. Treatment now to be efficient must be radical. Cervical dilatation followed by curettage with a sharp curette to the extent of destruction of the lining mucosa, or Schroeder's operation of

excision of the cervical mucous membrane are indicated as the best methods of curing chronic or latent vaginitis due to gonorrhœa.

Management of specific vaginitis as above suggested will assuredly result in fewer cases that are pronounced incurable, and in fewer cases that by extension of the infection to the Fallopian tubes and ovaries, are relegated to the pelvic surgeon for permanent relief only after irreparable damage has been done.

SOCIETY REPORTS.

THE CLINICAL SOCIETY OF LOUISVILLE.

Stated Meeting of February 7th, 1893.

THE VICE-PRESIDENT, DR. J. M. KRIM, in the Chair.

SPASTIC PARALYSIS FROM CENTRAL LESION.

DR. W. O. ROBERTS: This patient is eight months old. At the time of its birth the mother had a hard and protracted labor and was delivered with instruments. She noticed soon after birth of the child that it did not seem to have any use of one arm, that it seemed to be turned or twisted to one side, the arm was abducted and rotated inward. Six months after birth (two months ago) the child was taken to a surgeon in a neighboring city, who said there was dislocation of the shoulder and a fracture of the forearm. He worked with it, put it into splints and had it under treatment for six weeks; the splints were removed after he went home. The family say that the arm is in much better condition than when this gentleman saw it. By examination now you will notice that movements of the elbow are very good, as are those also of the wrist; pronation and supination seem to be all right. But there is limited motion at the shoulder joint, and in examining the axilla you will find that the pectoralis minor muscle is tightly contracted. The hand on the affected side is very much smaller than that of the other side and the fingers are in a flexed condition, but can be straightened out. There

is little or no difference in the size of the two arms.

A peculiar feature of the case is that the anterior fontanelle is entirely closed, which rarely happens at the age of eight months.

DISCUSSION.

DR. T. P. SATTERWAITE: I think the case is one of spinal trouble. It is not an uncommon thing for children to be born with paralysis of some of the muscles. There was a gentleman in this city born with paralysis of the deltoid muscle, and that was the only muscle in the arm that was paralyzed. When I saw the case the man was about 35 years of age, and had never had any use of that muscle. This case is one of central nerve lesion.

DR. W. O. ROBERTS: The doctor who saw this case claims to have reduced two dislocations and set a fracture. There is now apparently no evidence of a fracture having existed, no callous or anything pointing toward fracture, and it has only been two months since he first saw the child.

DR. J. G. CECIL: I hardly know what to say about the case; the history is so uncertain; having to depend on the family to give an account of an obstetrical case makes it a very unsatisfactory and uncertain sort of history. It struck me at first that it must have been simply a dislocation of the shoulder, which had been produced

in the delivery. As you know we sometimes have difficulty in the delivery of the shoulders even after the head has passed with comparative ease. I saw in consultation a case not very long ago of forceps delivery, in which there was an occipito-posterior position, delivered with forceps after pretty hard effort, and the shoulders failed to rotate into the antero-posterior diameter of the outlet making delivery very difficult, so much so that both my consultant and myself thought it very probable that there would be injury to the shoulder joint but fortunately even although we had to use considerable force in the delivery of the shoulders, no injury was done. I can very readily see how in this case there might have been detention of the shoulders, and a blunt hook could have been introduced in the axillary cavity and the consequent injury from this procedure. But if there has been a dislocation of the shoulder, I fully agree with Roberts that there ought to be more evidence of it now. The reduction of a shoulder joint dislocation in a child, after six months standing, would most certainly show more evidence than we find here.

The question as to whether it is central lesion or spinal trouble is one that seems to me to be in a good deal of doubt. I thought from the peculiar crease upon the child's head that possibly it might have been the result of forceps injury, but the mother says the head was not marked at all by instruments. It is also unusual that the anterior fontanelle should be entirely closed at the age of eight months, yet I cannot see how that would have any effect upon the subsequent history of the child, except by possible interference with development of the brain. The history is so uncertain that it seems to me it would be very hard to get at a correct diagnosis in this case.

DR. W. O. ROBERTS: I cannot think that there was any dislocation, because had there been the arm would not have been brought close to the side twisted in this way, it would have stood out more. It is a case of spastic paralysis from central lesion. I think the physician who treated the case simply improved the position of the arm by stretching the contraction. Then again the wasting of the hand and drawing in of the fingers would indicate central trouble.

As to treatment, now that is a point of

considerable interest as to whether passive motion, massage and stretching these contracted muscles will overcome the rigidity, or whether it would be better to divide the muscle in the axilla. My idea is the best plan of treatment would be passive motion with electricity and massage for a couple of months, and then if the trouble is not overcome, divide the muscle and stretch it. That will give motion to the shoulder, then of course the muscles of the arm and forearm will have to be tested with electricity to see whether there is any paralysis.

DR. J. G. CECIL presented "Specific Vaginitis" as the subject for the regular discussion (see page 410.)

DISCUSSION.

DR. F. C. SIMPSON: (visiting) I do not think there is any question about numbers of these cases going on for months from no other cause than negligence in treatment. As Dr. Cecil says the difficulty is to get at all portions of the vaginal canal. I believe this can be done if the case is properly managed. Physicians, I believe, are often very negligent on this point, which may account for numbers of cases being reported cured and afterward develop some pelvic trouble. I think it is advisable in these cases to take a sample of the discharge and have it microscopically examined to see whether all the gonococci have been destroyed. The trouble might apparently be cured, still from lack of thoroughness, if any of the gonococci remained in any part of the canal or in the uterus, there will be a return of the symptoms, possibly with such severity as to require operative interference.

DR. P. GUNTERMAN: Dr. Cecil has said about all there is to be said upon the subject. I do not agree as far as my experience and reading goes, with the statement that urethritis is always present in specific vaginitis, but I do believe that cervicitis is always present, which I believe should be treated the same as vaginitis with douchings, and then you can make local applications to the cervix carrying them up into the body of the uterus if necessary. A solution of corrosive sublimate I think is considered best by all authorities for use as douche in these cases, weak at first and the strength increased afterward. I agree with Dr. Simpson that it is advisable in these cases to have

the secretion microscopically examined and think it should be done by a very competent man, and even then there is doubt in my mind whether it can be proven in all cases that the vaginitis is gonorrhœal in origin, as there is another coccus which so nearly simulates the gonococcus that they cannot always be differentiated.

DR. L. S. McMURTRY: I think Dr. Cecil's paper is most opportune indeed. Until very recently the profession has regarded gonorrhœa in the female as a trivial disease. There is a large proportion of the profession, even at the present time that, make no discrimination between leucorrhœa of simple catarrhal character and specific vaginitis, all cases being treated as leucorrhœa. It seems to me that the time has come when more attention should be directed toward the prevention of the severe sequelæ of gonorrhœa—prosalpinx, ovaritis, suppurative peritonitis, which require abdominal section—by giving careful attention to its treatment in its incipency. It is rather exceptional for patients with gonorrhœa to seek medical aid early in the attack. I was greatly pleased to see that Dr. Cecil has interpolated on the back of one of his pages the sentence that "specific vaginitis as a rule is accompanied by urethritis" and was surprised to hear such a close observer and profound student as Dr. Gunterman say that he did not agree with the essayist in that particular. It has certainly been my observation that specific vaginitis is invariable accompanied by severe urethritis.

The greatest defect I think in the treatment of specific vaginitis, as mentioned by the essayist, has always been that the physician treats these cases in a very desultory manner, advising the patient to use a vaginal douche, yet does not instruct her how to do so properly. It seems like a very simple thing to discuss at length, but it is a fact that very few practitioners inform a woman as to the position they should assume in taking a vaginal douche; that sitting over a basin and using a syringe forces down all pelvic organs preventing access to the folds of the vagina. I think a fountain syringe preferable to any other for this purpose. Instead of sitting over a basin the patient should be in a semi-recumbent position with a rubber cloth such as can be found in almost every house under her hips, which should

be slightly elevated, then the nozzle of the syringe can be introduced into the vagina so as to reach all the surface. I have very grave doubts as to whether any woman is competent to treat herself by vaginal douches for gonorrhœa, efficiently. The treatment of this disease is the same as the treatment of an abscess, and ought to be so regarded. I am losing my faith in antiseptic injections to cure gonorrhœa. I doubt very much whether 1 to 10,000 solution of bichloride of mercury can make much impression upon virulent gonorrhœa; I believe that everything which is accomplished is done by flushing and by drainage. If you use simply hot water, placing the patient in the proper position, using two fingers in the manner described by Dr. Cecil, thoroughly flushing the vaginal surface, much good can be accomplished; and the oftener it is done the better. If you have the patients under control and can get them to devote themselves to it, I think the vagina should be flushed with hot water from four to six times in the twenty-four hours during the acute stage; then pass a piece of iodoform gauze up to the cervix so as to encourage drainage all the time in the intervals between—if this line of treatment could be followed out our results in the acute stage would be more satisfactory. Of course this is sometimes impracticable, and as long as treatment is neglected or imperfectly carried out, there will be a great many cases followed by endometritis, salpingitis, and peritonitis.

There is one point upon which I must differ with the essayist; that is, I do not believe we ought to open up the cervical canal and interior of the uterus until the indications for it are positive. By opening up these surfaces we may readily spread the infection over a field not yet invaded.

DR. J. G. CECIL: In the paper I divided this subject into three stages, and indicated treatment accordingly; for the first stage I suggested that the solution of bichloride should be very mild 1 to 10,000 until after the acute symptoms had subsided, perhaps a week or two, then to attack the sub-acute condition with a stronger solution, 1 to 2,000 or 1 to 3,000, and after that the third stage.

DR. GEO. W. GRIFFITHS: Do you not use acetate of lead and the other drugs

that are known to produce good results in these cases?

DR. J. G. CECIL: I stated that I believed the successful treatment of gonorrhœa depended more upon thoroughness of detail in the management than upon the medicine used; that I was certain in my own mind that nearly all of the popular prescriptions would be followed by success if directions explicitly given by the physician were thoroughly carried out by the patient and her nurse. I have confidence in a good many drugs, and simply referred to corrosive sublimate as probably the best.

Concerning the douche point: I really do not think it makes much difference what kind of a point is used, or in what direction the current flows, but the important point is to get the medicated wash, whatever you are using, to every part of the diseased surface, and that is why I dwelt upon so simple a matter as giving a douche. It is a well known fact that if you allow a woman to squat down over a vessel and give herself an injection with an ordinary syringe, with any kind of a douche point, whether the current runs one way or the other, there will likely be parts of the vaginal surface that will not be reached at all, hence chronic gonorrhœa will result, and it will exist indefinitely unless a thorough line of treatment is persevered in. When a woman sits down over a vessel a portion of the vagina is practically shut off, and this is why I described so minutely the manner of taking two fingers and spreading out every part and fold of the vagina, having the patient in the dorsal decubitus with the hips slightly elevated; in this way you can be sure that the solution is carried to every part of the vaginal tract, and unless done in this way I do not think you can be positive that the douching has been thoroughly accomplished.

I do not know what proportion of cases of salpingitis, pyo-salpinx and pelvic peritonitis or abscess are due to gonorrhœa, directly or indirectly, but any one reading over a list of cases where trouble has been taken to ascertain whether or not there was the previous history of gonorrhœa, it is simply astonishing to find how many of such cases give such a history, and for that reason it seems to me the importance of this matter can hardly be exaggerated. I think Dr. McMurtry, and all men who do

pelvic surgery, will appreciate the importance of prevention. Certainly it is better if we can cure a case, and I admit all he says about the difficulty, and for that reason I took occasion to run off on to side-issues and say that I thought government control ought to be established over prostitutes as they are the ones who promulgate the disease. We may not be able to exterminate it, but if we can prevent it becoming chronic and extending to the upper and more remote genital passages, we are doing a great service to humanity.

The subject of the suppression or cure of this disease is one I have often thought of, and one that I am glad to see has very recently been seriously agitated. In yesterday's *Record* I noticed an editorial on this subject, and in the last week's *News* another editorial upon the recent article of Neisser as to the proper management, control and suppression of gonorrhœa. I do not know how to express in words what the importance of this subject is to the human race at large. When we see all of this train of complications and after results of gonorrhœa, we certainly cannot exaggerate it. I believe most of us will admit that we are often very negligent in the treatment of cases of gonorrhœa. Gonorrhœa in women is infinitely more serious than it is in men and we all know from recent discussions, if we have not known it before, what terrible results follow the neglect of proper treatment in the male, but in the female it is infinitely more so. Consequently I believe a continued agitation of the subject especially called for, and by bringing it to the minds of the medical public generally, good results will come.

In regard to the point mentioned by Dr. Gunterman: I think he will find recent authorities all agree that urethritis is an invariable accompaniment of specific vaginitis. That is really the only differential diagnostic point that can be made clinically, between simple and specific vaginitis.

I do not know whether Dr. McMurtry in his remarks concerning the treatment of cervicitis caught my meaning exactly, so it will perhaps be well to state it over: If he will recall the paper, I stated that after you had treated in an active and vigorous way the sub-acute symptoms of gonorrhœa with douche and with an iodoform pencil

in the urethra; if after all that you found that the gonorrhœa or vaginitis continued, an examination in that case would likely discover a cervical catarrh. After you have used the douche thoroughly for a length of time sufficient to cure; after you have used the iodoform plug in the cervix in order to favor drainage, then to cure the cervical catarrh which keeps up the specific vaginitis, I favor as the third stage of treatment a vigorous attack upon the cervical mucous membrane. My observation in the treatment of gonorrhœa, quite extensive I may say, because I have had the opportunities for six or seven years in the clinic at the University of Louisville to see a great many cases of cervical catarrh, leads me to believe from the class of patients presenting, that they were generally gonorrhœal in origin, and that ordinary treatment did them but very little good. I am thoroughly conscious of the fact that it is dangerous to invade the uterine cavity unless it is urgently demanded. I am equally certain that cases of cervical catarrh of the kind I have just mentioned did not yield to vaginal treatment, and am pretty well satisfied that a thorough destruction of the cervical mucous membrane, which as you know is studded with follicles, is necessary in almost every case to effect a cure.

Now with proper precautions I believe that curetting can be done without fear of further infection. I think the woman is in greater danger of infection from extension of the disease to the higher cavities, the womb, tubes, etc., by allowing the catarrh to remain, or by temporizing with it by medicated washes, etc., than if you, under the proper precautions, use the sharp curette. I have seen such results from the use of the sharp curette in the cervix—in fact I do not remember ever to have seen a bad result—that I am inclined to advocate this treatment for the relief of all cases of obstinate cervical catarrh, by this means getting rid of the disease with the destruction of the mucous membrane.

DR. J. M. KRIM: Do you make any application to the surface after curetting?

DR. J. G. CECIL: I do not believe any application is necessary; further I do not think any curetting short of the destruction of Naboth's glands will cure the case, as gonorrhœa may lurk in these glands and nothing short of their complete destruction will have a permanent effect. However it is not a bad plan to follow cu-

rettage with a caustic like nitrate of silver.

DR. J. M. KRIM: By doing this it would certainly seal the raw surface and prevent any further infection from gonorrhœa. I think in these cases plain hot water for douchings without any bichlorides will do just as well. I have used bichloride solution in the male for gonorrhœa of strength 1 to 10,000 with no bad effects as far as the injections were concerned, but I never found that this treatment was any more successful than plain hot water.

Reproduction of Printed Matter, Engravings, Etc.

The *Moniteur Industrielle* gives the three following methods: M. Breton exposes the face of the print to be copied to the vapors of iodine, and then applies it face downward to a polished zinc plate. After contact for awhile the print is removed. The zinc is then printed from exactly as though it were a prepared lithographic stone. M. Balagny reproduces leaves of books, etc., by placing under each leaf a film of sensitized gelatin and exposing it to the light. The gelatin film is then used to print from exactly as in the carbon print process. Finally M. Ginestet, of the Department of Public Works, of Paris, soaks the page of print, the design or drawing in acidulated water for awhile, and after draining off, applies it to zinc or lithographic stone. After contact the design is removed, and the zinc or stone printed from in the usual way.—*Ex.*

For Cementing Iron.

The following mixture for cementing iron is strongly recommended: Equal parts of sulphur and white lead, with about one-sixth proportion of borax, are the constituents of the mixture, and the three should be thoroughly incorporated together so as to form one homogeneous mass. When the composition is to be applied it should be wetted with strong sulphuric acid, and a thin layer of it should be placed between the two pieces of iron to be connected, these being at once pressed together. This cement will hold so firmly as to resist the blows of a steam-hammer, and dry so completely in a few days as to leave no trace of the cement, the work then presenting the appearance of welding.—*Ex.*

CORRESPONDENCE.

MEDICAL COLLEGES AND SMALL CITIES.

MR. EDITOR:—It is both a significant and deplorable fact that the great cities of the United States have the fewest Medical Colleges both relatively and absolutely. New York has three, Philadelphia three and Chicago three. Yet such small cities as Louisville and Cincinnati are blessed with four each, and such small villages as Ft. Wayne, Ind., and Keokuk, Iowa, have one each. Joplin, a little hamlet out in Missouri, did, for a short time, sport something which the good-natured inhabitants pointed to with pride as their medical college, but the cold and unfeeling Illinois Board of Health sat down on it and Lo! it was not. As Artemus Ward said: "Why is this thusly?" Surely if New York, Philadelphia and Chicago, with their three million and more of population, centered in states representing, in the aggregate, nearly ten million people can get along with three schools each, small villages, located within the glare of their electric lights, ought not to consider the world totally bereft of knowledge if they should be found with no medical college at all.

There is a great tendency in both the South and West to multiply schools of all kinds. It does not occur to them to concentrate capital and energy at a few large centers of population where the emoluments of business are so large and gratifying that both talent and superior attainments can afford to be found. Vanity and avarice alike encourage this state of affairs.

We have no hereditary titles of nobility in this country. In the West and South the rage for titles is almost epidemic. All cannot be justices of the peace or "squires." There are a few of the rising generation who were not in the army and who do not belong to the G. A. R., hence fail to reach the proud distinction of Captain or Colonel. But there are one or two titles which are as common as walnut hulls around a country school house. These are Doctor and Professor. Hence the great demand for something cheap in the way of a school by those who aspire to the title of doctor, and the eagerness to

supply this demand by those who wish to stagger along under the learned appellation of professor. True the "hoss" doctor, the "writin'" master and the "destrict" school teacher are all called professor by an admiring and accommodating public, but knights of the fleam and the ferule receive their accolade on account of useful knowledge which is indispensable to their calling. Is the veterinary ignorant? then some old horse may die from lack of that help which he ought to be able to give, and his rustic owner lose forty or fifty dollars. Is the young teacher lacking in knowledge of the three R's? then some budding genius may be nipped by the frosts of ignorance because not properly tutored by the rising pedagogue. Not thus is the average professor in the village medical college. His one positive and enduring attribute, which stands out in bold relief, is not unfrequently a large, thick, dark stratified quality of ignorance. True, he now and then tries to hide it from the senior class of two or three, with a large translucent label of conservatism—and sometimes succeeds. Then when his classes graduate consultations are multiplied even if the multiplier be not very large.

By being known as a teacher in a college, people who can not make distinction between the little one-horse institutions with a graduating class of two and a matriculation of some twenty-five or thirty, and some great and amply endowed school like the University of Pennsylvania or the Michigan University, suppose that a Professor is a Professor anywhere and are thus often led to believe that a great man resides among them.

But the advancement of mediocrity into a large practice or into places of honor, and then fastening on a title like tying a tin can on a dog's tail, is not the worst nor the only evil inflicted by the multiplying of opportunities for superficial students to slip into practice easily. Cheap doctors are made abundant, and the struggle for existence becoming sharper and sharper, competent men are discouraged, and stay out of a profession

that exhibits such a contest between bread-and-butter scramblers and scientific enthusiasts who look upon sordid motives as always subordinate to the pursuit of truth, and the evolution of methods tending to ameliorate the ills that flesh is heir to.

It is the great number of small, weak, insufficiently endowed, meagerly attended and poorly equipped medical schools that has kept medical education at a stand still for so long, and that has set a standard of attainments for graduation so low that a diploma from most of them has no more force and commands no more respect than a patent medicine certificate. It is the mighty array of these schools, whose name is legion, that has kept off the statute books much needed legislation regulating the teaching and the practice of medicine.

In a condition of society such as existed a few decades ago, there might have been some excuse for the existence of inferior medical schools in a few of the smaller cities. The country was filling up rapidly and the sparsely settled districts needed a supply of cheap and ready doctors. Opportunities for medical education did not then differ so much in the larger from what they were in the smaller cities. The sciences auxiliary to medicine were neither developed, studied nor taught as they are now. Clinical instruction was almost unknown, and obstetrics was taught in a very imperfect and theoretical way only. Didactic lectures supplemented by a course of reading in text books constituted the curriculum in almost universal enforcement. This régime could be carried out in a city of moderate size as well as in a more pretentious one.

But modern medicine as it is taught, has enlarged its field, changed its methods, improved its facilities and added to its curriculum until great centers of population and immense moneyed endowments are absolutely essential to meet the much greater demands which our rapidly advancing civilization is constantly enhancing.

There is another and graver condition of things brought about by trying to organize and equip a medical school in every little place that has a post-office and a railroad. It gives our homœopathic brethren the power to get a higher average in the attainments of their graduates, and often

we have to blush for ourselves instead of our irregular competitors. They are comparatively few in numbers, hence can only afford to support a medical school in a large city like Philadelphia, New York, Boston or Chicago. In cities of this size their clinical advantages are great; and, having to compete with the University, Jefferson, The Rush or Harvard, they are compelled to set an equally high standard for graduation. Thus it happens that the alumnus of a school like the Hahneman of Philadelphia with its three years course of study, and the clinical advantages of the great hospitals of the city like Blockley and the Pennsylvania, turns up his nose, and justly too, at the graduate of some little two year institution located at Grubbs' Mill or some other little Southern or Western town, though it be ever so "regular." It would be far better for the profession and for mankind in general, if a law was passed authorizing any man after he had practiced five or ten years to take his choice of titles as Col., Capt., Prof. or "Squire."—In order to be perfectly just we might save the title of "Squire" for the midwives.—Under such a regime as this the rage for titles, the hunger for artificial distinctions might be approved without organized robbery. For when a lot of old bald-headed antediluvians in some little town get together and organize themselves into a mutual admiration society and call it a medical college, they pass one another on the street as often as possible thereafter, and spread their ears out like a palm-leaf-fan to catch the greeting: "Good morning Professor! Fine day Professor!" Then the Professah bows and smiles, and gets up against something and rubs himself—he feels so good. If the gratification of childish vanity was the only result of these cheap John schools there would not be so much to regret. But when men take a young man's money and are unable to do more in the way of tutoring than mix a few vulgar anecdotes with some ancient history and a few quotations from the scriptures; when the clinical advantages consist possibly of a fracture or two, a case of phimosia and a few cases of pediculi and intermittent fever, they also rob students of their time.

Let us have fewer Professors and more teachers. Let us have fewer schools and richer endowments. Let us keep the advancement of scientific medicine more to

the front and ourselves more in the back ground. Let us work more and quarrel less. Let teachers be selected for what they have done and not for what some rich relative *can do*. Let schools be organized for the benefit of the student and those he must treat, and not to push forward some action of wealth or some master of medical skull-dugger.

Then no respectable sheep will be ashamed to see his skin converted into a diploma. Then may the teaching and licensing power be entrusted to the same body. Then will the Irregular lamb and the Regular lion lay down together—with the lamb inside—Selah!

WM. H. LINK, M. D.

Petersburg, Ind.

NEW YORK LETTER.*

About a month ago, at a meeting of the Section on Obstetrics and Gynecology at the Academy of Medicine, Dr. E. H. Grandin read a paper on the "Treatment of Purulent Puerperal Peritonitis." The exceedingly high death rate of this disease added interest to the interesting paper presented. Dr. Grandin said that fifteen years ago it was the practice to treat all cases of puerperal peritonitis with opium. He followed out this plan of treatment in several cases and all died. Later on the saline method of treatment prevailed, and he tried this in a considerable number of cases with a mortality similar to that he got from the use of opium. During the last few years he has resorted to laparotomy, and in a series of four cases has saved two of the patients. In all the cases symptoms of peritonitis came on soon after confinement, and his earlier experience had taught him that it was useless to resort to opium or to the saline treatment.

In the first patient upon whom he operated, he found a large abscess in the left side of the peritoneal cavity and communicating with the uterine cavity. This was complicated with general peritonitis. He washed out the cavity and drained it by means of a tube through the uterus. This patient recovered.

The next two cases had general purulent peritonitis and both died in spite of the operation. The fourth case was of the same nature, but fluctuation could be felt above Poupart's ligament on the left side. The patient survived the operation and at present is doing well.

Dr. Grandin considers that fifty per cent. is a high mortality, but that it is far

better than the results obtained under the old method of treatment. He said that the high mortality of this disease was due to general systemic infection which preceded the peritonitis. Notwithstanding that a patient's chances are very small when purulent peritonitis sets in, it is well to do an abdominal section as the purulent collection may not be general.

In the discussion which followed Dr. Van Randohr said that it was certainly right to evacuate pus wherever it was found, but that in general purulent peritonitis the patient would die anyway, and if it were not purulent such remedies as alcohol would pull her through. A general purulent peritonitis cannot be diagnosed from one that is not purulent.

Dr. Edebohl believed all that the author of the paper had said. He has lost the patients upon whom he performed coeliotomy for general purulent peritonitis; it was not from the effects of the operation, but from the peritonitis.

Dr. Collyer thought that the author was correct in his views, and that his paper would set the profession thinking on this point.

Dr. Garrigues said there was no possible way of telling whether or not a peritonitis were purulent, and if it were purulent, whether or not it were local; of course, if it were local the pus should be evacuated by surgical procedure. He mentioned his list of thirteen cases of general puerperal purulent peritonitis, all of whom he treated with opium and succeeded in saving seven of them.

Dr. Grandin closed the discussion by saying that in the series of cases which he mentioned, there were collections of pus throughout the general peritoneal cavity, hence it would have been impossible to

*Special Correspondent to THE MEDICAL AND SURGICAL REPORTER.

cure the cases with alcohol, opium, or salines; that these same remedies would be of no service in a localized peritonitis, and since, when a diagnosis of general purulent peritonitis was made, abdominal section might show the process to be local, he thought that one was justified in opening the peritoneal cavity.

At a meeting of the Section on Surgery at the Academy, some time ago, the president, Professor Joseph D. Bryant exhibited a man whom he cured of a large aneurysm of the external iliac artery. The patient was thirty-five years old, with a syphilitic history. Two years ago while supporting a heavy weight on his right side he felt a boring pain in the right side of his abdomen, and soon there developed a pulsating tumor in this locality. The man had been treated by other surgeons before coming to Dr. Bryant, one of whom introduced twenty yards of fine wire through a canula, for the purpose of forming a clot. Treatment by compression was also tried but both of these methods failed and the tumor continued to pulsate and to give pain from its pressure effects on the lumbar nerves.

The patient came to Dr. Bryant about seven months ago. At that time the tumor was the size of a large cocoa-nut, distinctly showed an expansile pulsation synchronous with the ventricular systole, and a bruit could be heard over the tumor and transmitted down over the course of the femoral artery.

It was at once seen that the patient's condition was serious and it was decided to try McEwen's method for the cure of the aneurysm. Several long steel needles were made, varying in diameter from one-half to one millimeter. A couple of the smaller needles were first introduced, until their points reached the opposite interior wall of the sac. With each pulse-beat the needles were moved, their points irritated the interior of the sac and thus set up an inflammatory process, and from this a white thrombus formed. The location of the irritation was changed every ten or fifteen minutes until the whole lining of the sac had been gone over. These needles were left in for twenty-four hours, but no change in the tumor seemed to result. A week later two of the larger needles were inserted

and left in for forty-eight hours. In a few days after their removal, the bruit lessened and gradually disappeared, the tumor diminished in size, the pulsation gradually became less pronounced and the man ceased to complain of pain.

This case has interested the surgeons of the city considerably, as not many cases of cure by McEwen's method have been reported, and because of the high mortality attending aneurysms in the large cavities.

After-Effects of Chloroform.

Luther (*Munch. med. Woch.*, January 3, 1893), says that changes are found in the kidneys after death by chloroform, however produced. He says that almost after every administration, especially if prolonged, albumen and casts appear in the urine. The author has found that (1) the urine was normal when no after-effects, such as vomiting, etc., were present; (2) of many cases examined, the after-effects were most marked in the single case in which abnormal constituents were found in the urine; (3) albuminuria and cylinduria go hand in hand, and disappear after a few days, and (4) the casts are mostly hyaline. He concludes for these reasons that (1) the use of chloroform should be limited to cases where it is necessary; (2) in every case before prolonged narcosis the urine should be examined, renal diseases being a more important contra-indication than heart disease (except fatty heart); (3) chloroform narcosis should be restricted in the case of the pregnant and lying-in, and it should be absolutely avoided in eclampsia, since it must be prolonged, and the kidneys are nearly always diseased; and (4) mild diuretics are of value in the after-effects of chloroform.—*British Med. Journal*.

Glycerin Jelly for Mounting

Microscopical preparations is best prepared, according to J. E. Huber (*Phar. Centralh.*), by excluding water altogether. Macerate 1 dram of gelatin in 12 drams of glycerin, and after 12 hours effect solution by the aid of a water bath. The specimens to be mounted are first soaked in dilute and then pure glycerin. They are then placed on the slide with the least possible dilute glycerin and then covered with the liquified jelly.—*Western Drug*.

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SATURDAY, MARCH 18TH, 1893.

EDITORIAL.

CHOLERA THIS SEASON.

Preventive Medicine and the Germ Theory are the crowning triumphs of the nineteenth century.

While the germ theory has taught us but little in the way of therapy, it has placed the science of prophylaxis on an eminence never before attained. The ounce of prevention has come to be worth several pounds of cure.

In view of the possible, nay probable, epidemic of cholera during the hot season just ahead of us, it behooves us as a people, both in the aggregate and segregate, to preach, practice and enforce all the means of prevention within our knowledge or power. This is a form of charity in which we need not fear to let our right hand know what our left hand does. Let those in large cities whose duty it is to look after the health of the inhabitants see to it that the cities are put in the very best possible sanitary condition. In this connection the words clean and sanitary are synonyms. Let the fat alderman "with fair round belly with good capon lined" stop the amber stream of lager long

enough to consider for a moment the welfare of the tax-payers whose money he delights to spend.

Let the small towns clean up their yards and outhouses. Let them abolish the stinking pig sty whose odor exhalet to heaven, whose muddy floor offers a free soil, a good culture medium and fine home-stead law for any wandering cholera spirillum or diphtheritic coccus that chooses to stake off a claim and "prove up" in a quarter section of such inviting territory.

The water supply of both cities and small towns should be looked after with scrupulous care, and where the source of supply is likely to be contaminated, the people should be instructed to boil all that is used for drinking purposes.

With our present knowledge of the comma bacillus, and how to destroy it, we can act with intelligence and effect in our efforts to ward off the coming pestilence. Now is the time to act. Now is the time to get scared. "Let us act in the living present."

There is reason to fear an epidemic from either or both of two sources. The germs of last year may lie dormant till favorable weather appears when they can get a foothold that can scarcely be eradicated. Again, infection may come along the lines of travel and commerce and easily slip past the scattered cordons of quarantine.

But in order that there may be no mistake made when cholera does appear, or when diseases which simulate it make their presence felt in our midst, all physicians in commercial metropolis, at least, should make themselves familiar with both

the natural history and the bacteriology of the disease in order that a panic may not grow out of some simple case of belly ache; and, on the other hand, that no precautions to avoid contagion may be neglected in the presence of the real disease under the impression that only a case of ordinary cholera nostras is to be conquered.

Sternburg has lately shown that sunshine is one of the very best destructive agencies which the comma spirillum can be exposed to. Let us turn on the sunlight. It is both cheap and plentiful.

TRANSLATIONS.

A Report of Purperal Cases of the Munchener Franenklirik, 1877 to '91.*

According to Dr. Madlener, during the years 1887 to 1891, there were 4,000 pregnant women cared for; 3,944 of these were delivered at the Maternity, 55 were admitted during or immediately after labor; 27 died, a mortality of 0.67 per cent. Ten died of puerperal infection, 5 from rupture of the uterus, 3 from eclampsia, 2 from access of air into the uterine veins, 1 from sublimate poisoning, 2 from acute anæmia, 1 from carcinoma of the ovaries, 1 from pneumonia, 2 from cardiac trouble. Death occurred in 3, during labor, 2 immediately after completion of labor, 22 during the later period of the puerperium.

In the 27 fatal cases there were 13 operated upon. Of the 10 infected cases, 2 can be excluded since the infection took place before they were admitted.

The rules for the disinfection of the patient are: First, bath, then douche and enema with the use of plenty of soap and a 5 per cent. solution of carbolic acid, followed by vaginal injection of 1 metre of sublimate solution of 1 to 1,000. Before examination the hands and forearms are washed and brushed for 3 minutes in warm water, then 1 minute in 5 per cent. of carbolic acid solution, special attention

being given to the nails; lastly, the hands are again washed and brushed in a sublimate solution of 1 to 1,000. Lysol has been found unreliable in these cases. During the labor injections are used only when strictly indicated; in normal labor irrigation is not used. After instrumental delivery the vagina is washed out with sublimate solution of 1 to 1,000. This is also done where intra-uterine manipulation may become necessary. Hot douches minus the sublimate solution are often used. The author speaks, in detail, of various methods for disinfection used in all the German Maternities, which show but very little differences. It is notable, however, that those who have a rise of temperature are not isolated and have no separate nurses. On the other hand, however, they have their own vaginal tube, thermometer, catheter and bed pan, and are instructed to wash themselves. Madlener finally gives an explicit history of the fatal puerperal cases. 6 cases suffered from metro-lymphangitis; 1 case from thrombus producing metro-phlebitis; 1 case showed symptoms of both; in 2 cases it was impossible to find either a lymphatic or venous complication. In these cases there had been great anæmia following placenta prævia. He finds that the above cases followed a distinctive course. The metro-lymphangitis proved fatal in from three to fifteen days; clinically peritonitis seemed to be the first symptom,

*Translated for the MEDICAL AND SURGICAL REPORTER by Marie B. Werner, M. D.

fever being high, showing very little remission. Chills were noticed in 4 out of 6 cases, pulse usually rapid, never less than a hundred. It is rather the rule than the exception to find ulcers at the entrance of the vagina; the lochia were fetid. In the metro-phlebitis cases there was an absence of the peritonitis symptom, fever began without a chill and showed no remission. The chills set in a week after, taking at times the remittent type and at other times the intermittent. The length of time in illness was forty-seven days. In the 5 cases of rupture of the uterus, 3 were due to violence and 2 were spontaneous. The first resulted from trying to produce version; four times the rupture was complete and once incomplete. Eclampsia was seen eleven times, 3 women died, a mortality of 27 per cent.; that of the children was 46 per cent. The fatal case of sublimate intoxication followed seven vaginal douches of a hot sublimate solution of 1 to 1000, which were given ante-partem to hasten labor. It was a case of artificial induction of labor.—(*Much. Med. Abhandl.*, iv 2, 1892).

A Rare Case of Injury During Labor.*

Dr. Opiering (*Centr. Bl. f. Gynæ*) reports the following case:

In the Schauta clinic of Prague, a primipara of 41 years, sustained during delivery a perforating wound between the rectum and the vagina, without injury to the perineum. The pelvis was normal, the vagina remarkably contracted. In spite of good labor pains, which had brought down a segment of the head, it failed to make any further progress. The head being in left position, a right episiotomie of about three centimetres was made. The next labor pain was followed by sudden bleeding from the rectum, and the right hand of the fœtus appeared in the anus as far as the elbow, without however, injuring the perineum. After reposition of the arm and birth of the child, the examination of the vagina showed a tear extending its entire length from the columna. The tear extended in its middle portion into the rectum about a hands breadth. Prompt healing followed the tamponing of the vagina.

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The Treatment of Fracture of the Patella.*

Paul Klemm has used the following treatment for the last five years, which he reports in the *St. Petersburg Med. Wochen.*

Soon after the admission of the patient, at and around the knee-joint, massage is used. He places great stress in massage being particularly directed to the central portion of the fracture in order to increase the lymphatic and venous circulation. After the massage the joint is wrapped in cotton and then a dressing of adhesive plaster, which exercises a certain amount of pressure upon the intra-articular extravasation at the same time keeping the fragments of bone coaptated. The extremity dressed in this manner was then placed in a fracture box and moderately elevated. After three or four days the bandage was removed and the leg again thoroughly massaged. From this time on it was massaged daily, and after two weeks passive motions were used, the patient encouraged to elevate the leg with the knee extended. Between the third and fourth week the patient was encouraged to walk around the room with the aid of a cane, and the beginning of the sixth week usually discharged. Bony union was never met with; there was always a tense, fibrous uniting band which, however, did not interfere with the action of the knee-joint. In all cases there was complete active ability to extend as well as flex up to 50 degrees.

The Treatment of Abortion.*

E. Eckstein, of Teplitz, gives a report of 66 cases of abortion in Martin's clinic, in Berlin, all of which resulted favorably. The author recommends the instrumental treatment as the only rational method, while the tamponade should be used only in such cases where there is insufficient dilatation of the cervical canal. In cases where there is sufficient dilatation, prompt removal of the uterine contents should be practiced. In cases of five months and upwards the patient should be treated the same as if she were at full term; should, however, fever be present, due to decayed material in the uterus, this should be promptly removed and the uterus curetted. Ergot is given only after the uterus is emptied.—(*Schmidt's Jahrb.* Bd. 237, No. 1)

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ABSTRACTS.

FIVE CASES OF LAPAROTOMY PERFORMED ON PATIENTS OVER SEVENTY YEARS OLD.

J. Rutherford Morison, M. D., says:— Long lists of successful ovariectomies can no longer serve any good purpose, for it has been proved that the mortality of ovariectomy should not exceed five per cent. Sir G. M. Humphry long since pointed out that in old people repair and recovery are likely enough to follow major operations. This is true of abdominal section—a fact not sufficiently recognized. The author's list includes all the patients over seventy years of age, on whom he had performed abdominal section, five in number. Four of them had ovariectomy successfully performed. Three of these are well and active at the present time. One died nearly two months after operation from the results of appendicitis. The fifth recovered from an exploratory abdominal section made to ascertain the nature of, and to treat if possible, an abdominal tumor of doubtful character and origin.

CASE I., 1890. A widow aged seventy, with a cystic tumor in the abdomen, which was distended to about the size of a six months' pregnancy. Operation on Dec. 22, 1890. A broad ligament cyst was exposed, tapped, and enucleated after dividing the peritoneum covering it. The hemorrhage was arrested by tying each bleeding point as exposed. A large raw surface was left, over which the stripped peritoneum was laid. The operation occupied one hour. Drainage was employed for three days. The patient recovered so rapidly that she was allowed to get up on the tenth day, and went home well in a fortnight.

CASE II., 1892. A widow aged seventy-four. A large, well-defined cystic tumor was discovered to be the cause of the prominence of the abdomen, which was larger than a full-time pregnancy. On August 6th, 1892, the author removed a large cystic ovarian tumor free from adhesions. The after progress was uneventful. On the ninth day the dressings were taken off for the first time and the sutures taken out. The wound had entirely healed by first inten-

tion. On the fifteenth day the patient went home well.

CASE III. A widow aged seventy-two. On September 8, 1892, the author performed the following operation. A flaccid cyst of the right ovary containing about one gallon of very thick glairy fluid was removed. The left ovary, with a hard tumor about the size of a walnut growing from it, was also taken away, and the abdominal wound entirely closed. Subsequent progress was most satisfactory. The dressing was changed for the first time on the tenth day after the operation, when the stitches were taken out. The wound healed by first intention except at one place about half an inch long, where the skin had become inverted and granulations were visible. This healed a few days afterwards. On the tenth day the patient left her bed, and on the fifteenth she went home.

CASE IV. A widow aged seventy-seven. She had never been robust, but usually healthy. The patient was a thin, dark woman, who looked ill, with high temperature, tender swollen abdomen and cedematous legs; the right leg was more swollen than the left. An operation was performed on Sept. 20, 1892. On opening the abdomen in the right linea semilunaris, an ovarian tumor the size of a football was exposed and removed. No pus was found. The cæcum was adherent to the parietes, and a fluid collection could be felt behind and to its outer side extending back to the loin.

A second incision above the center of the crest of the ilium allowed the escape of fully six ounces of fetid pus. The anterior or ovariectomy wound was sutured and the lateral wound drained with a glass tube, each wound being separately attended to and dressed. The ovariectomy wound never gave any trouble and quickly healed. Until October 8th, the after progress was most satisfactory; the general condition improved, with return of appetite, sleep and freedom from pain. On this date the glass-tube could not be replaced by the nurse, Dr. Munro, or the

author, and for the first time since the operation her evening temperature was over 100°. October 9th: No discharge from sinus; evening temperature 103°. 12th: A gush of pus from sinus with lowered temperature. Recurrence of a similar sort took place till October 20th, when a fresh tender lump was noticed. 25th: Under chloroform I freely opened an abscess which extended from the iliac crest to the costal margin. The cavity appeared to be between the muscles of the abdominal wall and contained about four ounces of pus. Improvement followed and the patient was able to be out of bed. Soon, however, she relapsed, with some evening rise of temperature. November 5th, Dr. Munro suspecting a further collection of pus, he explored again under chloroform and found pus at the bottom of the first sinus in a large cavity. A counter-opening was made in the back; two full-sized india rubber drainage tubes were passed from the front openings through it, and the cavity was irrigated. The patient never fully rallied and died on November 9th, 1892.

The following is extracted from Dr. Munro's post mortem report. An abscess cavity extended from the anterior surface of the bladder, which was covered with pus, outside the peritoneum, along the iliac fossa, and upwards to the under surface of the liver. The three openings made at different times all led into one cavity. The second abscess cavity was between the *obliquus internus* and the *transversalis* muscles. No communication between the abscess sac and the peritoneum could be discovered, but from eight to ten ounces of pus were found in the pelvis, and the intestines were glued together with purulent lymph. The cæcum and a portion of the ascending colon and ileum, with some surrounding tissue, were sent to the author for dissection. The appendix vermiformis was glued to the posterior surface of the cæcum and the ascending colon. About half an inch from the cæcum it was perforated by a ragged ulcer. The perforation opened into the abscess cavity. The ulcer had nearly cut off the distal from the proximal end of the appendix. Both portions were pervious. No concretion was found.

CASE V. A woman, aged 70. She complained of painful swelling in her bowels, and weakness. Three weeks be-

fore admission, a painful tender swelling was discovered by Mr. Martin on the right side. Some diarrhoea was the only other symptom. A mass on the right side softened, showing a tendency to point. On Sept. 1st, 1892, the author opened the abdomen in the middle line and introducing his hand, found the bulk of the tumor to be a retro-peritoneal malignant mass surrounding and involving the cæcum. The pointing swelling was now punctured with an hypodermic needle in the right iliac fossa, and pus was discovered. The median wound was closed and dressed, and a drainage-tube left in a separate opening for the abscess cavity. The patient was returned to bed apparently no worse for the operation. The median wound healed in three weeks without any trouble. During September and the first half of October she improved in condition, though profuse suppuration continued, and she was once out of bed. Then symptoms of increased cardiac failure showed themselves in breathlessness and œdema of the legs. On October 30th, 1892, she complained of pain in the left leg, which was noticed to be discolored at its most dependent parts by post-mortem-like lividity. On the day following, some of these reddened patches had turned black, and there was no sensation in the foot and leg, nor pulsation in the arteries. On Nov. 2nd, in the evening, she died somewhat suddenly. Before death total gangrene of the leg had occurred. Necropsy: There was contraction of the mitral orifice of an hypertrophied heart. No vegetations were detected on any of the valves. The left femoral artery was blocked for about six inches with an adherent blood-clot, white in the center and red at the ends. There was a large, malignant mass of glands behind the cæcum and surrounding it. The interior of the cæcum was extensively ulcerated, the ulcer having thick, hard walls. At the outer side and behind the cæcum and ascending colon, a large abscess cavity, extending from the pelvis to the under surface of the liver and diaphragm, was found. No secondary deposits were observed. Examined microscopically the growth proved to be a cylindroma.—*London Lancet*, Jan. 21st, 1893.

A dust of bicarbonate of soda will soothe a toothache.

TETANY AS A SEQUELA OF PUERPERAL ECLAMPSIA.

S. W. Wheaton reports a patient, a primipara, aged twenty who was seized with convulsions immediately after the expulsion of the placenta. In about four hours there had been thirteen attacks. The patient was comatose at that time and with dilated pupils. The conjunctival reflex absent, respiration rapid and irregular, and crepitations were heard at the bases of both lungs. Temperature 100° , pulse 150, feeble but incompressible. A few drachms of urine drawn off with catheter were found solid with albumen and contained blood, blood casts and $\frac{1}{2}$ per cent. of urea. Wet cupping to both loins; one eighth of a grain of hydrochlorate of pilocarpin was injected subcutaneously; twenty grains of chloral and a drachm of bromide of potassium were given per rectum. In an half hour another convulsion of a typical epileptic character occurred, preceded by a sighing sound and a marked contraction of the uterus. The wet cupping and pilocarpin injection were repeated and were soon followed by a profuse diaphoresis. Only four attacks occurred, during the next thirteen hours. She was however still unconscious, but could swallow; conjunctival reflex had returned, and temperature rose to 103° . Liquor Ammoniae Acetatis was given, two drachms every two hours, and also a purge and an enema. The secretion of urine increased, the albumen diminished and the urea increased. There were no signs of further lung mischief but a systolic murmur appeared at the apex of the heart, with no increase in its area of dullness. On the third day after confinement, while still unconscious she had spasmodic attacks of rigidity of the limbs; the ankle-joints extended and the toes adducted; the jaws rigid and pressure on the limbs caused increased rigidity.

This condition, which was thus typical of tetany lasted three days, after which it gradually disappeared, consciousness returning slowly; temperature became normal; the urine increased in quantity; there was complete loss of memory regarding events preceding the fits; secretion of milk was entirely absent but the involution of the uterus proceeded normally. Convalescence was complete in three weeks. Six months later the

urine contained still a trace of albumen.

The author further states that tetany always occurs after some cause producing exhaustion or defective nutrition of the nervous system. Especially is this the case in the easily-exhausted nervous system of children, in whom tetany is so common as the so-called "carpo-pedal contractions." These contractions may follow convulsions, diarrhoea, teething or any exhausting cause. In adults tetany principally occurs in women, especially from the exhaustion of lactation or pregnancy under unhealthy surroundings, as also in connection with hysteria as in a case reported by Dr. Caiger, (*The Lancet*, Aug. 20, 1887). Tetany may be regarded as the result of profound exhaustion or malnutrition of the higher motor centers of the cerebral cortex, in consequence of which the restraining influence is withdrawn from a lower stratum of cells, which are thus allowed to come into action without any regulation from higher centers. The normal action of this lower stratum of cells is to initiate movements corresponding to the typical attitudes of this disease, consequently when the higher control is withdrawn their uncontrolled action produces permanent contractures. In the case in point, the exhaustion of the higher centers was due to the repeated convulsions, and its intensity was marked by the long period of unconsciousness and absence of voluntary movement; also by the persistent high temperature, which latter is also probably due to the unregulated action of lower heat-producing centers, owing to the exhaustion of higher controlling ones. That no organic lesions exist in tetany is proved by the fact that it may recur in the same subject again and again at intervals. The cardiac murmurs were undoubtedly due to anemia, although at the time they gave rise to a suspicion of ulcerative endocarditis. This is frequently seen as a result of septicemia after delivery, to which cases of eclampsia are particularly exposed owing to the failure of antiseptics in patients with convulsions and suffering from involuntary evacuations. Another point of interest is the increase in the amount of urine and urea which followed measures for the relief of kidney congestion. No treatment was ordered

for the tetany except quinine and iron; it is essentially a symptom of deficient action of the nervous centres and requires a tonic treatment. Dr. Dakin has collected eight cases of tetany during pregnancy

(*Obstetrical Society's Transactions*, vol. xxxii., p. 163); they all occurred before delivery—not after, as in the present case—and one ended fatally.—*London Lancet*, Jan. 28, 1893.

SELECTED FORMULÆ.

Worm Powders.

C. W. Moister.

℞ Santonin 10 grains.
Calomel 15 "
Scammony, resin, powdered 15 "
Powdered sugar 30 "
Mix, and divide into 15 powders. Give one three times daily (on an empty stomach) for one day and repeat in three days if necessary.

C. W. Moister.

℞ Santonin 10 grains
Podophyllin resin 4 "
Powdered rhubarb 15 "
Sugar of milk 30 "
Mix, and divide into fifteen powders. Give powders 5 hours apart (on an empty stomach) until three have been given.
Omit a day, repeating the dose if necessary.

—Ex.

Typhoid Fever in Children.

Dr. Earl (Arch. of Pedriat.) gives the following as nutritious, aiding digestion, and a mild intestinal antiseptic:

℞ Pepsin cordial 3 i.
Syr. hypophos. comp. 3 iv.
Acid. sulphur. arom. 3 i.
Aque. menth. piper. q. s. ad. 3 ii.
M. d. Sig.—One teaspoonful, well diluted, four times daily.

—Ex.

Santonin Lozenges.

℞ Santonin 5 gr.
Pulverized sugar 3 dr.
Pulverized acacia 8 dr.
Mix well and add:
Mucilage of acacia 16 drops.
Water, a sufficient quantity.
Make into 10 lozenges.

—Phar. Era.

Diphtheria.—(Local Treatment.)

—PAINT.—

℞ Citric acid (cryst.) 3-4 "
Carbolic acid (cryst.) 3-4 parts.
Iodine tincture 5 "
Cognac 100 "
Apply every two hours by means of a cotton tampon.

—Ex.

In Syphilitic, Oral, Lingual and Pharyngeal lesions.

(Dr. G. Frank Lydston)

℞ Carbolic acid gr. 10
Iodide " 5
Menthol " 10
Oil of eucalyptus dr. 2
Glycerole of tannin " 2
Boroglyceride, enough to make. oz. 1
Label: Apply with a brush.

—Western Druggist.

Thymol and Salicylic Acid Against Fœtid Breath.

—MOUTH-WASH.—

℞ Thymol 1 part.
Borax 2 parts.
Alcohol 4 "
Distilled 2000 "
Externally!—Use several times daily.

Or:

℞ Salicylic acid } of each, 1 part.
Saccharin }
Sodium bi-Carbonate }
Alcohol 30 parts.
Mouth-wash!—Teaspoonful to a glassful of water, several times daily.

—Journ. de Med. de Paris.

For Toothache

Take of:—

℞ Menthol 36 grains.
Chloroform 1 drachm.
Mix, and after the cavity of the tooth is cleansed apply a few drops on a piece of cotton wool.

—Ex.

Fissure of the Nipples.

℞ Salol dr. 1
Cocaine hydrochlorate gr. 2
Ether fl. dr. 2
Collodium fl. dr. 4
—Am. Pract.

Worm Syrup.

Ch. and Dr.

℞ Fluid extract of spigelia 5 ozs.
Fluid extract of senna 3 ozs.
Oil anise 10 minims.
Oil caraway 10 "
Syrup 8 ozs.
Mix.
Dose—One or more teaspoonfuls at intervals until purging commences.

—Ex.

Ringworm.

℞ Oleate of Copper ½ drachm.
Benzoated Lard 1 ounce.
Mix; the ointment to be applied night and morning.

—Pop. Med. Month.

Prophylactic for Tonsillitis.

The following is recommended for use by those persons predisposed to the development of tonsillitis (*Clin. Jour.*):

℞ Olei. menth. pip. mviij.
Acid. carbolic (crystal) 3j.
Spt. vini. Rectificat. 3ij.

M.

Sig. Ten drops to be added to a cup of warm water, and this solution to be used as a gargle night and morning.

—Ex.

Nervous Debility.

- R** Acid phos. dilut. 3 4.
 Callisayz elix. 3 2.
 Elix. valerian ammon. 3 1.
 Glycerine. 3 2.
 Vini zerici, q. s. 3 8.
 M. Sig.—Tablespoonful in water three times a day.
 —*Ex.*

Dusting Powder for Children.

- R**

	Parts.
Burnt alum.....	15
Boracic acid.....	15
Precipitated calcium carbonate.....	150
Starch.....	250
Carbolic acid.....	3
Oil of lemon, a sufficient quantity.	

 —*Ex.*

A simple yet efficient prescription for allaying the craving for drink in dipsomania is as follows:

- R** Tr. capsici..... m x.
 Tr. nucis vom..... m x.
 Ac. nitric dil..... m xx.
 Aquæ..... 3 ii.
 M. Sig. This quantity to be taken three times a day.
 —*Cincinnati Lancet.*

Anal Fissure.

Allingham strongly advocates the use of the following ointment:

- R** Hydrarg. subchlor..... gr. iv.
 Pulv. opii.....
 Ext. belladonna..... aa gr. ij.
 Ung. sambuc..... 3j.
 M. Sig.: To be applied frequently.
 —*Ex.*

Syphilitic Ulcers.

Dr. Mauric prescribes an ointment composed of:

- R** Hydrarg. chlor. mitis } aa grs. xv.
 Zinci oxidi..... }
 Petrolati..... 3vj.
 Pulv. amyli..... grs. xiv.
 M. ft. ungt
 —*Ex.*

Iodated Water in La Grippe.

Dr. G. J. Muller (*Wiener Med. Presse.*) has administered iodine with good results in the grippe. The action of the remedy is noticeable, at the latest, twenty-four hours after its administration. It acts best in painful cases, with colic, etc. Aqua iodata is a solution of iodine in 5000 parts of water. The solution should be freshly prepared every time it is taken. One may prescribe:

- R** Tinct. iodine..... 2 gms. (grs. xxx)
 Alcohol..... 40 gms. (3jss.)
 Five drops twice a day in half a glass of water. Sugar may be added to the water; every other addition is to be forbidden.

Substitute for Mother's Milk.

The following is claimed to be almost exactly identical with normal woman's milk in composition:

- R** Cow's milk..... 1 pint.
 Water..... 3/4 "
 Cream..... 5 tablespoonfuls
 Milk Sugar..... 3 "
 —*Exchange.*

Expectorant.

The best remedy to loosen expectoration is muriate of ammonia, combined with some such remedy as syrup of squills. If dry plastic pleurisy be present, iodide of ammonium should be added as follows:

- R** Ammonii muriat..... 3 iiss.
 Syr. scillæ..... 3 ij.
 Ammonii iodidi..... 3 ss.
 Glycerini..... 3 ss.
 Syr. prun. virg., q. s..... ad 3 iv

M. Sig.—3 j every three hours in water.

At the same time in a case of pleurisy, to prevent any possible tubercular tendency, give something to build up tissue and aid general strength; something to strengthen the chest. The best thing for this purpose is the syrup of the hypophosphites, 3 j three times a day after meals.

—*Exchange.*

Liniment of Subacetate of Lead.

This sedative and cooling application to burns is a mixture of 40 parts of solution subacetate lead and 60 parts cotton seed oil.

For Painful Hæmorrhoids.

(*Lancet-Clinic.*)

- R** Ext. of krameria..... dr. 2
 Cocaine hydrochlorate..... gr. 8
 Oil of eucalyptus..... m. 12
 Cacao butter..... enough.
 Make into twelve suppositories.

Boschee's German Syrup is said to have the following formula:

- R** Oil of tar..... 1 part.
 Extract of ipecac, fld..... 4 parts.
 Extract of wild cherry, fld..... 6 parts.
 Tincture of opium..... 4 parts.
 Magnesium carbonate..... 3 parts.
 White sugar..... 80 parts.
 Distilled water..... 48 parts.

Triturate the magnesia and the oil of tar together, mix the fluid extracts and the water, and triturate the whole with the oil of tar and magnesia. Filter, add the sugar and dissolve in the cold by agitation.

—*Nat. Druggist.*

Scrotal Eczema.

- R** Hydrarg. chlor mit..... 5i.
 Zinci oxidi..... grs. 40.
 Bismuthi subnit..... 3 1/4.
 Lanolin..... 3 i.
 Vaseline..... 3 1/2.

M. Ft. ungt.

Sig.—Wash the scrotum in hot borax water, and apply the ointment night and morning.

—*Ex.*

Wash for Pruritus.

- R**

	Grammes.
Menthol.....	4
Alcohol.....	30
Water.....	60
Diluted acetic acid.....	120

Wash with this instead of with plain water.

Applications for Burns.

A German hospital surgeon recommends (*Munch. Med. Woch.*) the following:

- R** Linseed oil..... 3iv.
 Lime-water..... 3iv.
 Thymol..... gr. vj.
 Dissolve the thymol in the oil before adding the lime-water.

CURRENT LITERATURE REVIEWED.

THE AMERICAN GYNECOLOGICAL JOURNAL for December contains an article by Dr. Charles P. Noble on

Early Diagnosis and Operation in Cancer of the Uterus.

The author urges the importance of early diagnosis, while the disease is limited to the cervix or the body of the uterus and before the tissues surrounding the uterus have become involved. After involvement of the parametrium a cure becomes impossible. The classical symptoms of hemorrhage, discharge and pain are discussed, and hemorrhage following sexual intercourse is pointed out as a sign of great value in the early diagnosis. "Whenever this occurs, the case should be thoroughly investigated." The old teaching that women approaching the menopause are subject to flooding is, in the author's opinion, most dangerous and the cause of so many cancers reaching the stage of ulceration before discovery. "Especially when women have ceased to menstruate and again have a metrorrhagia, should the case be carefully studied." An offensive discharge is present in the ulcerative stage of all cancers, while cauliflower growths give rise to a watery discharge at a much earlier period. Pain is present late in the disease and is due to the involvement of neighboring tissues, peritonitis, etc. The diagnosis of cancer is made from the physical signs aided, if necessary in doubtful cases, by microscopical examination of a portion of the suspected tissue. Papillary and cauliflower growths are easily recognized by the excrescences on the cervix. In its early stage, epithelioma of the cervix may be confounded with the results of inflammation, but "when a definite area in the cervix is hard, infiltrated, and constitutes a distinct mass or tumor in the cervix, it is probably cancer and should be examined microscopically." After ulceration has taken place the diagnosis is easy, and the only conditions liable to be mistaken for it, chancre or gummata, are rare. The author reviews the treatment by curetting, caustics, amputation of the cervix and total extirpation; and decides in favor of total extirpation, as, up to the present, that has given the best results. Statistics are given proving this.

[It is of interest in this connection to note that one operator* recently stated that he had removed cancerous uteri in several instances from virgins, thereby refuting the teaching that the disease is the result of injuries received in childbearing.—Ed.]

Dr. Charles N. Smith reports a case of

Appendicitis

in a child six and a half years old, who, after eating a pint and a half of peanuts within twenty-four hours, presented the classical symptoms of appendicitis—constipation with vomiting, distention and tenderness of the abdomen, especially over McBurney's point.

*Dr. Joseph Price.

Castor oil was given, causing free evacuations of the bowels consisting mainly of masses of undigested peanuts. The patient improved for a time but, three months later, her condition became such that removal of the appendix was imperative. At the operation the pelvic viscera were found glued together by recent, soft adhesions and a small quantity of flaky pus appeared as soon as the peritoneal cavity was opened. The peritoneal coat of the cæcum had sloughed off over an area 1½ inches long by ½ to ¾ of an inch wide. The appendix was found adherent to the cæcum and inclosed in a small cavity formed by adhesions and filled with pus, perforated at its tip and containing a hard, foreign body and a small quantity of liquid feces. Its peritoneal coat was necrotic. The appendix was ligated and removed, all adhesions broken up, the abdominal cavity flushed, a glass drainage tube passed into the pelvis and iodoform gauze packed against the necrotic intestines and mesentery. The patient did well till the fifth day when a bronchitis developed which extended to the smallest bronchial tubes and the patient died of capillary bronchitis on the sixteenth day. At the autopsy, the abdominal wound was found entirely healed. In the author's opinion, death was caused by the capillary bronchitis and was in no way due to the operation.

Dr. T. J. Crofford, in a paper on "Laparotomy as a Diagnostic and Prognostic Measure," shows the difficulty of always making an exact diagnosis in pelvic troubles, fortifying his position by the report of several cases. These cases illustrate the impossibility of appreciating dangers which may exist in the cases one often meets, by any means short of abdominal section. "Abdominal section *per se*," he says, "under modern methods, is attended with the minimum amount of danger. It is the intra-abdominal condition demanding the section which gives rise to the mortality."

A similar paper is that by Dr. A. V. L. Brokaw on

Experiences in Pelvic Surgery.

He confesses that, with increasing experience in pelvic disease, he finds himself well satisfied with an approximate diagnosis. The diagnosis of pus cases is usually clear, though he has operated for pus and found an extra-uterine pregnancy and *vice versa*. Only those, he says, without operative experience, or the theorists, always made correct analysis of their cases. Much of his work comes from the hands of the routine gynecologist "who treats all of his cases alike—introduces a speculum, paints the cervix with iodine, makes application to the cervical canal or within the uterus itself, insufflates some boracic acid, introduces a glycerine tampon and requests the patient to come again in two days." Much of his work comes to him after the methods of "gynecological tinkering" have been exhausted. In one condition

above all others exploratory incision should be adopted, namely: suspected extra-uterine pregnancy. It will not do to wait for the positive classical symptoms. They may come and come too late to save the patient. He advocates rapid operating in the dorsal position; a short incision; the drainage tube in nearly every case and the free use of hot water douching of the abdominal cavity. The paper includes the report of a case illustrating his views.

Dr. John Milton Duff contributes a paper on "Post-partum Hemorrhage." This he considers avoidable if proper precautions are taken, and the obstetrician should always be prepared to meet the emergency. The routine administration of ergot at the close of the third stage, he considers pernicious. It should be given only on a clear indication. Vinegar will not always control hemorrhage and he has seen cases in which it was useless. Should the hemorrhage occur from a torn cervix or vagina, the rent should be sutured or, if that is impossible, the cervix and vagina tamponed. He recommends tamponing the uterus with iodoform gauze in bleeding from the placental site. In such an accident, tamponing the vagina is worse than useless.

Dr. Lucy J. Utter reports several interesting "Cases seen in Practice," especially one where an unmarried woman was delivered of twins, one of whom had a very dark complexion and curly black hair, while the other was of light complexion with red hair. The woman confessed to having had intercourse with two men within twenty-four hours, one a very dark man and the other a very light one.

THE KANSAS CITY MEDICAL INDEX FOR FEBRUARY.

Dr. John Riddlon, of Chicago, and Robert Jones, F. R. C. S., of Liverpool, Eng., discuss "Operative Measures in the Treatment of Spondylitis" and describe the various operations for the relief of abscess due to spinal caries. The authors prefer the injection into the abscess cavity, after evacuation, of an emulsion of iodoform to the solution of iodoform in ether formally advocated. An expectant rather than an operative treatment of abscess in Pott's disease is advocated. The article is illustrated by wood cuts explanatory of the paper.

Dr. Emory Lanphear, in an article on "Cancer of the Stomach," urges the importance of early diagnosis and operative interference, presenting statistics on the subject.

Dr. A. H. Colvard contributes a paper on

Diphtheria,

reporting a number of cases to prove that this disease, which he holds to be primarily local, can be arrested in its earlier stages. He urges that every case of tonsillitis or sore throat occurring during an epidemic of diphtheria, should be treated as diphtheritic. He recommends the use of a mixture of tr. ferri chloridi, potassium chlorate, and hydrochloric acid, reasoning that the chemical re-

action will produce free chlorine in its nascent state. The mixture is given every two hours combined with the use of a gargle of mercuric chloride dissolved in hydrogen peroxide.

Dr. B. F. Fortner discusses "Pyosalpinx" and shows that other causes besides gonorrhoea can be responsible for the disease. Often it is due to a post-partum septicæmia. "Laparotomy as early as the diagnosis can be made is the only rational treatment." Electricity ought not to be expected to dispel a quantity of securely pent up pus. Catheterization of the Fallopian tubes he regards as useless and obsolete.

Dr. Fred Byron Robinson describes "Dr. Franklin H. Martin's New Operation of tying the Uterine Arteries for Bleeding Fibroids." An incision is made in the vagina on each side of the cervix and the uterine artery tied by a ligature passed through the broad ligament on each side, by means of a strong curved needle. The incisions are then closed. The advantages and objections to the operation are stated.

Other papers in this issue are: "Protracted Parturition" by Dr. William B. Dewees; "A Case of Malignant Peritoneal Cyst" by Dr. J. M. Baldy, which was originally reported to the Obstetrical Society of Philadelphia and published in the abstract of the society's proceedings in THE MEDICAL AND SURGICAL REPORTER for Oct. 29, 1892, page 692; and a lecture by Reginald Harrison, F. R. C. S., London, Eng., on "Prostatic Obstruction" which is taken from Wood's Monographs.

THE MONTREAL MEDICAL JOURNAL

for February contains a paper by Dr. H. H. Chown on

Enterotomy for the Cure of Fæcal Fistula.

The history of the case of fecal fistula reported is unique. The patient, a poor widow, living twelve miles from a doctor, had for years a lump in the left groin that appeared and disappeared and gave her no discomfort. She had never shown it to a doctor, but the reporter has little doubt that it was a small inguinal hernia. A fall converted the hitherto reducible hernia into an irreducible one. There were no symptoms of obstruction but, on account of the pain and the presence of the tumor, she decided to deal with it surgically on her own account. She therefore made an incision with a razor into the tumor, and succeeded admirably in performing a left inguinal enterotomy. Two months later she was admitted to the Winnipeg General Hospital, where the author operated on her for the closure of the artificial anus following the plan of Dr. Abbe, of New York. The bowel was divided and each cut end inverted and closed with a fine silk suture. The ends of the bowel were then drawn past each other for the space of six inches and united near the mesenteric line. An incision was then made in each portion of the bowel in such a position as to form a continuous passage for fecal matter. The two ends of the bowel were then further united by continuing the

mesenteric stitches around the incision in the bowel until they reached their point of origin. The woman recovered perfectly. The author regards the use of decalcified bone plates, catgut rings, etc., as unnecessary.

Dr. R. E. McKechnie reports "An Anomalous Rash in Scarlatina," in which the eruption was papular instead of the ordinary form. The cases were undoubtedly scarlatina, as all the other well known symptoms were present.

Dr. F. H. Menburn reports a case of "Tubal Pregnancy," in which the rupture took place between the second and third month. The patient at first refused operative interference, but later consented. The operation was undertaken too late and the patient died twelve hours after the laparotomy.

Dr. J. G. Adami contributes an article on "Modern Pathology," being an address delivered at McGill University. The subject of modern bacteriology is entered into fully, and the results shown of experimentation on the lower animals as to the production of disease.

Dr. T. J. Harrison in his "Address on Obstetrics," delivered before the Canadian Medical Association, considers the use of the forceps in labor; and Caesarean section vs. craniotomy. He advocates the early use of the forceps and craniotomy, rather than the Caesarean operation.

EDINBURGH MEDICAL JOURNAL.

The February issue contains a carefully prepared paper by Dr. Halliday Croom on "Premature Sexual Development in Relation Specially to Ovarian Tumors, with an Illustrative Case of Ovarian Sarcoma in a Child of Seven; Laparotomy; Recovery."

Precocious menstruation with associated premature sexual development, although by no means unique in its occurrence—as the medical literature of this country and of Europe attests—is yet of sufficient rarity to invest it with at least a transient interest to the observer when such an anomaly does present itself. After a careful perusal of the available literature the writer tabulates the cases found under the following heads:

1. Precocious menstruation with an early appearance of the external manifestations of puberty.
2. Sexual development with menstruation.
3. Menstruation previous to development of the sexual organs.
4. Early conception and pregnancy.
5. Premature sexual development associated with tumors of the generative organs.

Dr. John Wyllie in a continued paper entitled "The Disorders of Speech," under the heading "Speech in its Relations to Diseases of the Nervous System," considers:

1. Speech in its relations to insanity.
2. Illustrations of the manner in which language mirrors the condition of the mind.
3. The action of the speech centres in insanity.

Dr. David Wallace in his paper "Tumors of the Bladder" offers the following conclusions:

1. Tumors in the bladder are now known to be of more frequent occurrence than was formerly supposed.

2. The history of hæmaturia and its character may be strongly indicative of the presence of a tumor.

3. Positive evidence of the presence of tumor by the detection of portions of the tumor or characteristic cells is seldom obtained from the urine.

4. Cystoscopic examination, although not always possible, in the majority of instances enables one to detect the tumor when present.

5. With the cystoscope one is enabled to tell the site, size and superficial attachment of the tumor and approximately its character.

6. No evil results attend the use of the cystoscope.

7. Tumors in many cases can be thoroughly removed from the bladder.

8. Suprapubic cystostomy gives the best access to the bladder.

9. The proportion of malignant tumors as compared with benign is very high.

10. Sufficiently good results follow the removal of malignant tumors to justify operation.

THE PACIFIC MEDICAL JOURNAL

for February contains three papers: "A Case of Trephining in Epilepsy" which occurred in the practice of Dr. C. N. Ellinwood and is reported by Dr. Frank Fischer. The patient had received a hard blow on the head when a boy, which was followed by epileptic seizures, particularly marked on the right side. A button of bone was removed from the left side of the skull corresponding to the region of the hand centre. No disease of the brain substance was found though the bone was slightly thickened at this point. The patient recovered from the operation and during the six months which have elapsed has improved, though the attacks continue, but at longer intervals than formerly.

Dr. C. G. Kenyon discusses the operative treatment of "Empyema" by exsection of the sixth or seventh rib, or both, and thorough drainage of the pus cavity. The object of the exsection is to allow the chest wall to collapse and thus bring the sides of the abscess cavity into apposition.

The remaining paper is "Recent Discussions respecting Bacteria" by Dr. J. H. Wythe, in which the recent utterances of authors on the bacterial causation of disease are given in abstract.

THE WOMAN'S MEDICAL JOURNAL

for January contains an article by Dr. Mary Putnam-Jacobi on

Permanent Drainage in the Treatment of Endometritis.

in which she advises the introduction into the uterine cavity, under antiseptic precautions, of an aluminium drainage tube for the relief of this affection. Antiseptic douching

and intra-uterine packing around the drainage tube were also included in the treatment of the two cases reported.

The other paper in this month's issue is by Dr. Elizabeth Woods on Chronic Metritis and Endometritis. The various methods of treatment advocated by different authors are sum-

marized. As the writer of the paper confesses, she has no new facts to communicate.

[The journal makes its appearance for the first time, this being the initial number. It is edited and published by women and therefore should appeal strongly to them for support.—Ed.]

PERISCOPE.

THERAPEUTICS.

Quinine Tannate.

"Of the various compounds of salts of quinine met with none have perhaps received less recognition than the tannate, says Dr. A. C. Zeig. Whether it be due to a misconception of its therapeutic value, the writer is unable to state.

On examining various samples of this compound they were found to vary both in their physical properties and in the per cent. of quinine alkaloid in combination, the latter varying from 10 to 25 per cent. Natural quinine tannate is an amorphous grayish powder, odorless and tasteless, soluble to a small degree in cold water, soluble in alcohol, and but slightly soluble in ether. Owing to the objection raised against the more common and soluble of quinine salts this most peculiar compound often meets with favor when it is the intention of the prescriber to employ an article that will not offend a sensitive palate.

It has been questioned by some writers on this same subject as to whether tannic acid, by reason of its chemical structure and by the nature of its behavior toward reagents, is capable of forming a true compound with quinine similar to those of inorganic and organic acids containing displaceable acid hydrogen. Tannin, as we are well aware, is the anhydride of gallic acid, and like many anhydric oxides of its kind, is incapable of becoming hydrated by mere contact with water. It needs the intervention of other agents, as bases, acids or ferments, reinforced or aided by influence of heat.

For preparing the compound from the more common form of quinine, namely, the sulphate, the following formula may be recommended:

R	Quinine sulphate.....	40 parts
	Sulphuric acid dilute.....	40 parts
	Tannic acid.....	50 parts
	Sodium bicarbonate.....	10 parts
	Sodium acetate.....	10 parts
	Distilled water.....	q. s.

Dissolve quinine sulphate in 2000 parts of distilled water, with aid of the dilute sulphuric acid. Dissolve sodium bicarbonate of and sodium acetate in another 2000 parts of distilled water. When dissolved add to it the tannic acid, and triturate until complete solution is effected. Add the quinine sulphate solution to tannic acid solution, stirring the mixture while it is being added. Set aside for six hours, stirring it at intervals,

after which the precipitated tannate may be transferred to a wetted filter and washed. After draining it should be dried between bibulous paper at a temperature not exceeding 140° F. The resulting tannate of about 50 to 55 parts represents between 25 and 30 per cent. of anhydrous quinine alkaloid, equivalent to about 35 to 36 per cent. of the sulphate. Owing to incomplete combination taking place while the solutions are being mixed, it is quite important to let the mixture stand some hours before filtering. The bicarbonate and acetate of soda which, although they do not enter the product, facilitate the combination as well as filtration to a large degree, and may therefore be regarded as a valuable adjunct to the process. It should be borne in mind, however, that on too long digestion or contact with water, partial or complete conversion of the tannate into the soluble gallate may result, in which instance the compound has a decided bitter taste, and, furthermore, that when the compound be left in contact with saliva upon the tongue for some time a slight bitterness is perceptible, caused by the action of the alkaline saliva upon the same, while the bitter sensation of taste is altogether dependent upon the degree of alkalinity of the latter, thus varying in different individuals.

The compound is especially adapted for administration to infants and invalids, particularly those of the gentler sex who are afflicted with delicate digestive organs. The most agreeable method of administering this remedy is in the form of compressed tablets in which sugar and chocolate are made to act as adjuvants and render this pharmaceutical very acceptable, so that in place of displeasure or indifference we find these tablets really enjoyable. As offered by most manufacturers each tablet is made to contain one grain of quinine tannate, holding in combination 25 per cent. of quinine alkaloid.—*Phar. Record.*

Poisoned by Strychnine.

Twenty grains of strychnine sulphate was swallowed by mistake by an Englishman, who was saved by the treatment inaugurated ten minutes after the accident. The poison had been taken on a full stomach. Emesis was induced by hypodermic injections of apomorphine and mustard and salt by mouth, which was followed by the stomach pump. The antidotal treatment consisted in the administration of tannin, chloral and bromides.

Piperazin.

Drs. Biesenthal and Schmidt review (from the *Berliner Klinische Wochenschrift* in *Therapeutic Gazette*) the clinical reports on piperazin which have appeared recently. The reports of Vogt, Ebstein, Heubach, Kraukauer and Brik, all based on the use of Schering's Piperazin, are all very favorable. Testimony seems to be nearly unanimous that the remedy is harmless, and that it is effective as a solvent of uric acid. Biesenthal and Schmidt report seven cases in which the remedy has been tried. Four of the cases are given in detail. In three of the latter, who were gouty patients, and had attacks of gout, marked relief was obtained. The fourth patient had violent attacks of renal colic. On the first day the piperazin was used an extraordinary quantity of gravel was passed. After the second dose, on the next day, large quantities of gravel were passed several times, and almost immediate relief was experienced. Similar results were obtained in other cases. Biesenthal and Schmidt recommend the remedy very highly. Internally, they say, piperazin is best given in dilute solution in doses of fifteen grains distributed during the day. Its taste is very slight. As it is not irritating to mucous membranes, a one or two per cent. solution may be employed in washing out the bladder in the case of vesical calculi. Hypodermic injections into gouty deposits and local applications to gouty swellings may also be employed.

MEDICINE

Chronic Pulmonary Phthisis in Later Adult Life.

Dr. H. W. G. Mackenzie says :

The disease, while relatively less frequent than in early adult life, is still not uncommonly met with.

It more commonly attacks males than females.

The influence of heredity although less marked, can still be traced in some of the cases.

The disease is essentially chronic in form.

It is in a considerable number of cases limited to one lung.

Tubercular disease of the larynx and intestines is found in as great a proportion of the fatal cases as in earlier life.

The onset is usually insidious.

Cough, with emaciation and debility, should always suggest the possibility of phthisis in an elderly person.

Hemoptysis is less frequent except in the later stages, when there is considerable risk of profuse and possibly fatal hemorrhage.

The symptoms of disease are sometimes quite misleading, being abdominal in type, suggestive of malignant disease, and generally arising from intestinal or peritoneal tubercle.

Sometimes the physical signs are best marked at the apex posteriorly.

Sometimes the disease is complicated with chronic bronchitis and emphysema, which

mask the physical signs, and then is easily overlooked unless the sputum be examined for bacilli.

The duration of the disease is essentially protracted, but difficult to determine clinically on account of the gradual onset of the illness.

The maintenance of strength and nutrition, and the quietness of the pulse, are most encouraging as regards prognosis, while the opposite and the occurrence of complications are of grave omen.—*Med. Press and Circular*.

Diet in Obesity.

Dr. Towers Smith gives the following rules :

FIRST PERIOD, FOURTEEN DAYS.

Breakfast : Tea or coffee, with saccharin, if desired, in lieu of sugar ; bread or biscuits made from soya bean, two ounces ; grilled white fish or red meat, kidneys.

Lunch : Cut from joint of beef or mutton, taking no fat, and one helping of green vegetables, avoiding only peas, beans, and all roots ; soya bread or biscuit, one ounce.

Dinner : Clear soup, white fish, red meat, green vegetables as lunch ; soya bread or biscuit, one ounce.

DRINK.

First thing on waking : Tumbler of hot water with slice of lemon.

11 A. M. : Cup of bovril or clear soup.

Lunch : Two glasses of claret or one ounce of whiskey with potash water.

5 P. M. : Cup of bovril or clear soup.

Dinner : Two glasses of still hock or claret, or whiskey or potash.

Bedtime : Cup of bovril or clear soup.

Mustard, pepper, salt, Harvey's sauce, may be taken.

SECOND PERIOD, TWENTY-ONE DAYS.

Addition to No. 1 : Oysters, tongue, stewed fruit, with saccharin ; poultry, game.

THIRD PERIOD, THIRTY-ONE DAYS.

Additions to No. 2 : Toast instead of soya bread, for each meal, two ounces, savory jellies, aspic of prawns, plovers' eggs, jelly.

Dessert : A small quantity of fruit ; blue-mould Dorset cheese.—*Med. Times*.

Croup Treatment.

The employment of turpentine oil having given good results in diphtheritic laryngitis, Dr. Bonain (*Rev. de Lar., d'Otol., et de Rhin.*) was induced to try hypodermic injections of this medicament in two cases of well-pronounced croup, and both cases ended in recovery. He prescribes the following mixture :—

Lactic Acid..... 3 parts.
Syrup Tolu..... 50 "
Water..... 100 "

Half a tablespoonful every hour.

Besides, inhalations—two-hourly—of a teaspoonful of the following mixture were resorted to :—

Carbolic Acid.....1 part.
Alcohol.....} of each 10 parts.
Chloroform.....}

Finally, injections—morning and evening—into one of the supra-spinous fossae of a syringe (16 minims) of the following solution, were made:—

Tupertine Oil.....1 part.
Vaseline Oil.....5 parts.

By means of the above treatment, the cure is said to have been obtained, in the one case in seven in the other in four days.—*Merck's Bull.*

SURGERY.

Symphysiotomy in Man.

M. Albarran presented a man of thirty on whom he practised first symphysiotomy and then removed a large portion of the posterior surface of the bladder. This man was operated on two years ago for a neoplasm of the bladder, removed by the hypogastric incision. A year subsequently the hæmaturia reappeared, and a cystoscopic examination revealed a sessile epithelioma situated near the neck of the bladder. The operation in question was performed in September last. A longitudinal incision was made about three inches above the pubis, and carried down to within half an inch of the root of the penis, where it was terminated by small lateral incisions representing the branches of an inverted Y; the penis being freed from its attachments, an *ecarteur* was placed between the pubis and the bladder. The symphysis was then cut through and the two branches separated an inch and a half; a large section of the lower portion of the bladder was then effected without much difficulty, and the divided surfaces united by a double row of sutures; a catheter *a demeure* was placed. The patient remained seventeen days in an apparatus, and in a short time afterwards he was able to get up. At present he is able to work as usual, and has got very stout.—*Med. Press and Circular.*

A Method of Passing a Sound Through an Apparently Impassable Stricture.

In strictures apparently impassable for a sound of bougie even of the finest calibre, it is recommended (*La Semaine Médicale*, No. 1, 1893) to inject equal parts of a four per cent. solution of cocaine and one of sublimate, 1 per cent., into the urethra, compressing the penis somewhat in advance of the stricture with the thumb and forefinger of the right hand. Then the sound or bougie is introduced, the compression preventing the escape of the fluid. It is said to be astonishing with what ease the instrument will sometimes penetrate. This is probably due to the funnel-shaped distension of the urethra in front of the stricture. Possibly the cocaine contributes to the result, by reducing, to an extent, the congestion of the mucous membrane.

Death Under Chloroform.

Mr. F. Mortimer Rowland, M. B., Resident Medical Officer at the City Infirmary, Birmingham, has forwarded us the following report of a case of death under chloroform in that institution: M. S., aged 57, was admitted on November 9th, under Dr. Carter, suffering from ascites, which was thought to be complicated by a tumor (? cystic) in the right pelvic region, for which it was decided to operate. For this purpose, she was transferred to Mr. Jordon Lloyd; and on November 12th, the heart having been found to be apparently healthy, chloroform was administered on a piece of folded lint. Chloroform was given in preference to ether because of an asserted liability to pulmonary trouble. The patient took the anæsthetic perfectly well, and was in no way excited, respiration continuing evenly and deeply, and at normal rapidity up to the time when the skin incision had been made, when quite suddenly, and without warning, she became livid, made a few shallow gasps, and breathing ceased. The heart was examined instantly, and no sounds could be detected. The pupils were not dilated, being about a line in diameter. The tongue was well forward between the teeth during the administration. The head was lowered over the end of the table, and artificial respiration, both by Sylvester's and Howard's methods commenced, but no air could be made either to enter or leave the chest. Insufflation of the lungs was tried without effect, tracheotomy was then performed and insufflation again attempted, though again without effect. Heart puncture made within a few minutes of the onset of alarming symptoms showed the cardiac muscle to be absolutely inactive. Chloroform from the same bottle had been administered the day previously, and was given to another case immediately afterwards without any disturbing effect. The amount administered in this case was not measured accurately, but could not have exceeded half an ounce, and the patient was completely, but not deeply, under when alarming symptoms arose. It is thought respiration and circulation ceased simultaneously, but that the symptoms were due to respiratory cessation, aided by the upward displacement of the diaphragm from the abdominal fluid. At the *post-mortem* examination the cardiac condition was not such as could be recognized by auscultation, there being no valvular lesions, nor was the condition of the muscles such as could have affected the duration and tone of the first sound. Dr. Rowland calls particular attention to the following: (1) The normal size of the pupils; (2) the position of the tongue; (3) the sudden development of the condition; (4) the lividity of the face throughout in the entire absence of obvious signs of laboured breathing; (5) the early arrest of the heart's action as discovered by auscultation and puncture; (6) the complete failure from the first to make air either enter or leave the chest by any artificial means.—*Brit. Med. Jour.*

In all doubtful cases of injury to the skull, exploratory operation is justifiable.

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OBSTETRICS.

The Treatment of Eclampsia.

At the Académie de Médecine M. Charpentier read a paper on the treatment of eclampsia. Every woman, he said, pregnant and albuminuric being exposed to eclampsia, and the milk *regime* producing marvellous results in such cases should be consulted as regards her urine, and when the slightest trace of albumen is detected an absolute milk diet should be ordered as *preventive* treatment. Once the eclampsia declared, blood-letting should be resorted to if the patient be of plethoric disposition. From twelve to fifteen ounces of blood might be removed, and then chloral should be administered. If the woman be delicate and the phenomena of cyanosis but little marked, chloral alone will generally be sufficient. In an obstetrical point of view the following rules are useful to bear in mind: leave to Nature as far as possible the delivery; if the labor be tedious, on account of weak contractions of the uterus, the delivery can be hastened by the forceps, or the cephalotribe if the child be dead. Provoked delivery should be reserved only for exceptional cases, but in any case the Cæsarian operation should be rejected as well as deep incisions into the neck of the womb.

M. Gueniot said that eclampsia consisted of two fundamental elements, poisoning of the blood and excitability of the medullar reflexes. In certain cases the toxic principles play but a secondary role, while in others they constitute all the symptoms. In the first case it is frequently sufficient to relieve the woman of the fetus, or to give chloroform or chloral to arrest the attacks. In the second, on the contrary, a cure is very rare, and blood-letting seems to offer the only chance. As to chloroform and chloral he administered in the following manner: He gives the former until anaesthesia is complete, and keeps the patient under its influence in a deep sleep, for five or six hours; it is rare after such treatment that the attacks return. Chloral is more easily employed as it does not necessitate the presence of the attendant constantly at the bedside. It should be given in large doses and in enema so as to avoid the irritating effects on the stomach.

M. Tarnier considered that no matter what kind of treatment is adopted, eclampsia is always a grave malady, consequently the preventive treatment as recommended by M. Charpentier should be rigorously prescribed in every case where albumen is present in the urine.—*Med. Press and Circular*.

The Management of the Placenta in Delivery.

Beaucamp, of Aix-la-Chapelle (*Archiv. f. Gynak.*, vol. lxii, pt. 1, 1892), publishes statistics of 500 labors conducted after Ahlfeld's principle of leaving the placenta two hours' time to come away. He found that the average of flooding was high. In 163 cases

where flooding occurred the placenta was discharged spontaneously 89 times before the two hours had elapsed; in 67 cases it had to be expressed. Beaucamp concludes that expression of the placenta should be performed within half an hour, as that practice involves less risk of hemorrhage, nor does Ahlfeld's practice lessen the risks of retention of membranes. This occurred in 102 out of the 500 cases. A very important piece of advice is added to these statistics. Beaucamp urges, contrary to Ahlfeld's opinion, that the midwife must stay with the patient yet two hours more after the delivery of the placenta; for in his 500 cases flooding came on in 12 cases within the first two hours after the placenta had been expelled. Hence, if the midwife be ordered to wait two hours for the placenta, it is a grave mistake not to instruct her to stay yet two hours longer after it is born.—*Er.*

GYNECOLOGY.

Bleeding Fibroids and Endometritis.

Nitot (*Bull. et Mem. de la Soc. Obstet. et Gynec. de Paris*, November, 1892) recently removed large bleeding fibroids from two women over 40 years of age. In neither was there any trace of the fungous endometritis to which the bleeding seen in many cases of fibroid has been attributed. In one case the blood was seen oozing from innumerable pores, the dilated orifices of the glands of the endometrium. In the other the mucosa looked perfectly normal. In cases where endometritis exists that disease is a complication or coincidence, but not the cause of hemorrhage. The bleeding is, in Nitot's opinion, caused by the vascularity of the uterus above. Lucas-Championnière, in the discussion on Nitot's specimen, said that the endometritis was exceptional in fibroma. The true cause of the hemorrhage was unknown. It occurred in cases where the myomatous growth lay far from the mucous membrane, and might be absent in cases where the growth was in immediate contact with the mucosa.

Urticaria and Death after Ovariectomy.

Omori and Ikeda (*Centralbl. f. Gynak.*, 1892, No. 52), of Fukuoka, Japan, make note of this case in a series of 100 ovariectomies. The patient was aged 54; the tumor was a small dermoid, universally adherent to intestine and omentum; the pedicle was long, and also adherent to the surface of the tumor. On the morning of the fifth day the temperature rose very suddenly, and the whole body was covered with an eruption having all the characters of urticaria. Death occurred within a few hours. The fatal result was attributed to peritonitis, but the authors of the paper admit that they were doubtful on the point.

ARMY AND NAVY.

U. S. ARMY, FROM MARCH 5TH, 1893, TO
MARCH 11TH, 1893.

1st Lieutenant Henry R. Stiles, Assistant Surgeon, U. S. Army, will be relieved from duty at Jefferson Barracks, Missouri, on receipt of this order at that post, and will report in person to the commanding officer, Fort Omaha, Nebraska, for duty at that post.

Captain Marcus E. Taylor, Assistant Surgeon, U. S. Army, will be relieved from duty at Vancouver Barracks, Washington, at the expiration of his present leave of absence, and will report in person to the commanding officer, Fort Logan, Colorado, for duty at that post.

U. S. MARINE HOSPITAL SERVICE, FOR THE
FOUR WEEKS ENDING MARCH 3RD, 1893.

Murray, R. D., Surgeon, when relieved, to proceed to Key West Quarantine for duty, March 1, 1893.

Bailhacha, P. H., Surgeon, to proceed to New York, N. Y., for duty Feb. 13, 1893.

Purviance, George, Surgeon, detailed as Chairman, Board of Examiners, Feb. 13, 1893. To inspect Ready Island, Delaware River, February 23, 1893.

Hutton, W. H. H., Surgeon, to proceed to Solomon's Island, Md., as Inspector, Feb. 6, 1893. When relieved to proceed to Detroit, Mich. for duty February 13, 1893.

Hamilton, J. B., Surgeon, detailed Chairman Board to prepare Quarantine regulations, February 16, 1893, detailed as Chairman Board to examine officer Revenue Marine Service, February 28, 1893.

Austin, H. W., Surgeon, detailed as member Board to prepare Quarantine Regulations February 16, 1893.

Gassarrag, J. M., Surgeon, detailed as member Board of Examiners, February 13, 1893.

Godfrey, John, Surgeon, when relieved to proceed to San Francisco, Cal., for duty February 13, 1893.

Irwin, Fairfax, Surgeon, detailed for duty in office of the U. S. Consul, Marseilles, France, February 25, 1893.

Wheeler, W. A., Surgeon, detailed as Recorder Board of Education, February 13, 1893. Detailed as member Board to prescribe Quarantine Regulations, February 16, 1893.

Stoner, G. W., Surgeon, to proceed to Baltimore, Md., for duty, February 13, 1893.

Warden, Eugene, P. A., Surgeon to proceed to Baltimore, Md., for temporary duty, February 23, 1893.

White, J. H., P. A., Surgeon, to proceed to Hamburg, Germany, for duty February 27, 1893.

Carrington, P. M., P. A., Surgeon, granted leave of absence for seven days, March 1, 1893.

Williams, L. L., P. A., Surgeon, when relieved to proceed to Charleston, S. C., for duty February 14, 1893.

Bratton, W. D., P. A., Surgeon, detailed as member Board to examine officer Revenue Marine Service, February 23, 1893.

Kingorm, J. J., P. A., Surgeon, detailed as member Board to prepare Quarantine Regulations, February 16, 1893.

Guitoras, G. M., P. A., Surgeon, to proceed to Gulf Quarantine for duty, February 23, 1893.

Geddings, H. D., P. A., Surgeon, detailed as recorder Board to prepare Quarantine Regulations, February 16, 1893.

Wertenbaker, C. P., P. A., Surgeon, detailed as Recorder, Board to examine officers, Revenue Marine Service.

Condict, A. W., Assistant Surgeon, ordered to examination for promotion, February 14, 1893.

Hussey, S. H., Assistant Surgeon, ordered to examination for promotion, February 14, 1893.

Perry, J. C., Assistant Surgeon, ordered to examination for promotion, February 14, 1893, to proceed to Savannah, Georgia, for temporary duty, February 25, 1893.

Smith, A. C., Assistant Surgeon, ordered to examination for Promotion, February 14, 1893.

Roseman, M. J., Assistant Surgeon, to proceed to Hamburg, Germany, for temporary duty, February 14, 1893. When relieved to proceed to Antwerp, Belgium, for duty, Feb. 25, 1893.

Aydegger, J. A., Assistant Surgeon, to proceed to Charleston, S. C., for duty, temporary, February 24, 1893.

Eager, J. M., Assistant Surgeon to proceed to Key West, Fla., for duty, March 1, 1893.